SPECIAL ISSUE
NOVEMBER
2017

Bulletin of HIGHER EDUCATION RESEARCH

CONTENTS

INTRODUCTION

This special issue of the research bulletin presents conference proceedings comprising twelve papers, in abridged form, presented at the National Conference on Creativity in Education and Humanities which was held on 25-26 October 2017. The conference aims to develop knowledge and understanding about creativity, and raise awareness of the importance of creativity in education and humanities.

Creativity is necessary as it forms a good foundation for education and the humanities' ecosystem framework. It is also linked to concepts such as critical thinking, problem solving and innovation. The accurate understanding of the concept of creativity, and its application in the framework of current scenarios will be a significant agenda in the effort to produce sagacious workforce and innovative citizens. To compete in this challenging century, it is imperative to enhance creativity among individuals in the society including in pre-tertiary and tertiary education.

The papers selected for publication in this issue range from issues pertaining to creativity in teaching and learning, and the workplace, to internationalisation strategies. Some of the papers conceptualise how to deal with challenges creatively, while others present practical applications of creativity. Even though some of the papers do not deal directly with education, the issues raised have relevance to the context of education. Further, the insights and implications presented in the papers can contribute to the development of both pre-tertiary and tertiary education. All in all, the papers demonstrate the importance of creativity and the understanding of it in solving various problems today, and in creating a knowledge-based and creative society.

SERVICE-LEARNING INTEGRATION INTO THE COMMUNICATION CURRICULUM IN HIGHER EDUCATION

Diong Fong Wei, Universiti Tunku Abdul Rahman (UTAR)

INTRODUCTION

There has been increasing interest in service-learning in all academic disciplines around the globe. Service-learning is deemed to be an effective educational instrument incorporating provision of social services into an academic curriculum (Campbell, 2012; Celio, Durlak, & Dymnicki, 2011; Jones, 2011). This instructional tool is used to establish university-community partnership in tackling critical community issues (Campbell, 2012). Educators and researchers have variously described service-learning as an academic subject, theoretical concept and method or practice of teaching (Cooper, 2014). Notwithstanding the definition of this pedagogical approach, service-learning is recognized as an effective teaching tool in generating positive learning outcomes among students.
Literature indicates that the approach has been widely adopted in diverse academic fields. For instance, service-learning curricular are considered effective in preparing preservice teachers by integrating a diversity of real-life practices into teacher training. Such approach is deemed imperative to provide supplementary hands-on experience besides the conventional way of teaching students (Barnes, 2016). Yorio and Ye (2012) reported the effectiveness of service-learning as an instructional tool to enhance customary method of teaching and learning in business and management courses. Campbell (2012), concluded as much when social learning approach is integrated into a social work curriculum.

Malaysian higher education institutions are no exception to this inclination. A study by Yu and Farok (2012) suggests that local students' participation in service-learning programs encourages community education and thereafter fosters community engagement as lifetime practice. They used the example of a business development strategies and multicultural leadership community-based project whereby students are given the opportunity to help entrepreneurs in underprivileged community.

Given the growing attention to and practice of service-learning in higher education, the Malaysia

Education Blueprint 2015–2025 (Higher Education) has laid a strong foundation for an innovative education system by initiating entrepreneurial involvement, service provision learning and practical training in the first phase (2015).

SERVICE-LEARNING: UNIVERSITI TUNKU ABDUL RAHMAN (UTAR) EXPERIENCE THROUGH PUBLIC RELATIONS VOLUNTEERISM CAMPAIGN

Service-learning is not a new experience at Universiti Tunku Abdul Rahman (UTAR), since its inception in 2002 as a leading nonprofit private university serving the local and global communities. Echoing one of its mission statements, UTAR has placed great emphasis on offering effective curricula that promote personal and academic growth among undergraduates in responding to professional and community needs. Pivoted by the theme of volunteerism and community service, UTAR public relations volunteerism campaign is a community-engaged, leadership and teamwork development and public relations project organized by undergraduate public relations students in collaboration with Majlis Daerah Kampar (MDKpr), a local non-governmental organization and school, in addressing critical community needs.

To foster and reinforce service-learning among the students, this volunteerism campaign is held annually through two core subjects offered in the program, namely event planning and event management. In general, this campaign is concerned with social issues encountered by the local community which include traffic fatalities, vandalism, environmental problems, poverty concerns and animal issues. These student participants work in teams and explore community needs proactively through meetings, discussions and surveys before a feasible campaign plan is formulated.

Subsequently, the proposal is presented to collaboration partners before it is sent out to potential sponsors to obtain financial aids and in-kind sponsorship. Throughout the process, this project leverages the communication skills and knowledge of public relations students to develop and execute a public relations campaign that would bring about social change in the community. It is expected that universities' attempts in executing service-learning projects are likely to create a sustainable community with an active civic involvement among individuals with a high sense of social responsibility (Yu & Farok, 2012).

The idea of integrating service-learning into communication curriculum has exposed public relations students to field-based experiences where they deal with stakeholders in the complex setting of community. In planning and executing the campaign, students are given the opportunity to develop strategies in response to the social issues addressed by the stakeholders in a real-life situation. In other words, students are able to try and employ the philosophy and theoretical knowledge learned in the classroom in a real-world environment which eventually help to develop their experiential learning. This service-learning experience has enabled students to learn to serve and vice-versa. As asserted by Jones (2011), service-learning can be defined as a pedagogical method which links experiential learning to curriculum objectives through coursework and results in mutual benefits for learners and community.

CONCLUSION

It is evident that service-learning has received substantial consideration in higher education. A variety of academic disciplines are integrating this approach into the curriculum in higher education and communication education is no exception to this trend. As what this article is presenting, service-learning creates numerous opportunities among students to develop enhanced academic understanding of theoretical knowledge and linking their knowledge to field-based experiences in their communities. Most important, service-learning strengthens civic education and social accountability, which are the principal outcomes envisioned by most of the higher learning institutions today.

REFERENCES

Barnes, M. E. (2016). The student as teacher educator in service-learning. Journal of Experiential Education, 39(3), 238-253.

Campbell, E. M. (2012). Implementing service learning into a graduate social work course: A step-by-step guide. Journal of Teaching in Social Work, 32(3), 300-313.

Celio, C. I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. Journal of Experiential Education, 34(2), 164-181.

Cooper, J. R. (2014). Ten years in the trenches faculty perspectives on sustaining service-learning. Journal of Experiential Education, 37(4), 415-428.

Jones, S. H. (2011). Life is experienced until we die: Effects of service-learning on gerontology competencies and attitudes toward aging. Advances in Social Work, 12(1), 94-112.

Ministry of Education Malaysia. (2015). Executive Summary: Malaysia Education Blueprint 2015-2025 (Higher Education). Putrajaya: Kementerian Pendidikan Malaysia.

Yorio, P. L., & Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. Academy of Management Learning & Education, 11(1), 9-27.

Yu, G. W., & Farok, Z. (2012). Promoting civic engagement through a service learning experience. International Journal of Humanities and Social Science, 2(12), 83-88.

VIDEO TUTORIAL AS POTENTIAL TOOL FOR DEMONSTRATION OF PHARMACEUTICAL DOSAGE FORM PREPARATION FOR PHARMACY STUDENTS IN UNIVERSITY

Chan Siok Yee, Nur Aina Syakirah Yaacob, Amirah Binti Mohd Gazzali*
School of Pharmaceutical Sciences, Universiti Sains Malaysia

INTRODUCTION

CURRENT SCENARIO OF HIGHER EDUCATION IN MALAYSIA

Malaysia aspires to strengthen its education through globalisation. In today's world, knowledge is an important commodity to be transferred and shared. Universities are now forced to expand their role beyond lecture halls and this is currently the trend and scenario faced by higher education systems (1,2). Malaysia is also facing the same issues and universities in Malaysia are aware of the trends and major environmental forces that will influence the way they operate in the near future.

Teaching approach in higher education during the old time uses blackboard and chalk and this has evolved to the transparency projectors and subsequently the application of software such as Microsoft PowerPoint. Slowly in recent years, the trend is moving towards video-based learning, which will enable the students to learn more at their own pace. This is an indicator that online-based education is the way to go for a futuristic learning process and such diversified teaching technique will enhance the learning experience of students.

As recorded in the National Higher Education Strategic Plan, it is important to have a curriculum that is dynamic and relevant to the current market demand with the application of up-to-date technology in education (3). Knowledge is the current need of the society to grow further. Universities must be sensitive to the need of the industry and society if they want to remain relevant. As one of a timely approach, the Ministry of Higher Education Malaysia (MOHE) has come up with a national plan to introduce the application of Massive Online Open Course (MOOC) to enable dissemination of knowledge freely and openly.

Among the courses offered are in science and social disciplines including entrepreneurship, information technology and communication which are previously secluded and individualized only to the lecture halls in the universities. All these courses are delivered through video recordings and communication between students and the respective lecturer can be done through posting comment in the page or online chatting applications available in the platform.

FLEXIBLE APPROACH IN TEACHING AND LEARNING FOR PHARMACY COURSES IN MALAYSIA

In local professional courses offered by our universities however, the response to change is somehow lacking. This may be attributed to the need to follow the strict requirement for accreditation of the professional courses. To further complicate this, the professional bodies that govern the accreditation is mainly composed of non-academicians who are not in the field of teaching and learning. With specific interest in pharmacy courses, the accreditation of this course is governed by the Pharmacy Board Malaysia and the Malaysian Qualification Agency (MQA) which consist of mainly those in-charged on pharmacy registration and licensing, practicing pharmacists and only 20% from the committee members are from academia. The lack of understanding on the need to apply flexible teaching and learning approach may arise and this will cause lagging in the advancement of learning style of the digital native. To avoid this issue and to promote accord between the university and the respective professional body, evidence is needed to show that the application of advanced technology in teaching and learning of professional courses is useful and beneficial for students, and is not disadvantageous to the students' learning experience.

VIDEO AS A TOOL FOR PRACTICAL DEMONSTRATION OF PHARMACEUTICAL PRODUCTS

Video tutorial has been emerging as an effective new tool for students' learning. It can be categorised as a flexible technique that encourages self-regulated learning (4). The current students in the "Z-Generation", i.e. group of individuals who have been exposed to digital appliance at early age, learnt through a different path as compared to the previous "X-and Y-Generation". They prefer right and fast solution. Rather than taking time to make appointment and meet their lecturers, they search for their own solution through internet.
Taking the thinking and behaviour pattern of students into consideration, our group has initiated video tutorial in the teaching and learning of pharmaceutical dosage form preparations for first year pharmacy students. The feasibility of this approach was assessed among 111 students.

In this study, 93.5% of the students like the idea of video demonstration, 4.6% voted that they may like the idea and 1.9% dislike the idea. A poll on the students' opinions showed that 67.6% strongly agree that the video tutorial will be effective for their learning and 32.4% had a slight doubt on the effectiveness of this approach.

During the semester, three videos were prepared as an aid in their practical sessions. The students were asked qualitative on their opinion and among those captured are:
"The video preparation for practical is a very good initiative"
"I like the demonstration video for practical, because it is clearer for me to know what I should do. I can also know what to expect from my product"
"I would appreciate more video tutorial as it is good for reference and gives a visual idea of the techniques we need to master"
"Video tutorials are effective and good for our learning". Generally, good responses were received in this study.
"Videos are awesome!"
"Videos that teach how to carry out the practical are really useful"
"Tutorial videos for dosage forms preparation is very informative, clear and easy to understand".

The application of video as a tool in teaching and learning of professional courses is particularly useful because the video preparation process enable thorough checking and validation of the video content and quality by instructors before releasing to students. The prepared video can also be validated by professionals. This will promote effectiveness, prevent miscommunication, assumption and ensure accurate information are delivered to the students. As there is a potential gap between the instructors (older generation) and the learner who are mainly digital natives, miscommunication can be avoided which may occur during conventional teaching and briefing session prior to practical classes. Through this method, the instructor not only can deliver the content at flexible time but also ensure the right information is delivered.

Video tutorial application will need students to learn autonomously at home through online videos and actively searching for information on their own initiative. Thus, it is our hope that the use of video tutorial will improve the learning styles and experience of Asian students to a higher stage.

As Charles Darwin has put forward: "It is not the strongest of the species that survives, nor the most intelligent; but the one most responsive to changes". We are positive that the higher education system in Malaysia is always open and receptive to change based on the most current trend in education, in flow with the most recent technology advancement. With proper assessment and validation, the application of technology in teaching and learning is undoubtedly beneficial for the progression of education of professional courses.

REFERENCES

Azman N., Sirat M., Karim M.A. (2010). Building future scenarios for Malaysian universities. Journal of Asian Public Policy. 3(1): 86-99

Grapragasem S., Krishnan A., Mansor A.N. (2014). Current trends in Malaysian higher education and the effect on education policy and practice: An overview. International Journal of Higher Education 3(1): 85-93

Universiti Sains Malaysia (2007). Constructing future higher education scenarios – Insights from Universiti Sains Malaysia. Penerbit USM, Malaysia.

Wolters, Christopher A., and Hussain, Maryam. (2015). Investigating grit and its relations with college students' self-regulated learning and academic achievement. Metacognition and Learning, 10(3), 293-311. doi: 10.1007/s11409-014-9128-9

MAGNETISM OF MALAYSIA AS STUDY DESTINATION; AN INTERNATIONAL STUDENTS' PERSPECTIVE

Jamshed Khalid, Anees Janee Ali*
School of Management, Universiti Sains Malaysia
**Corresponding author*

INTRODUCTION

The advent of internationalization dimension in higher education has lifted the mobility trends of students and researchers around the globe. Understanding the factors of choice that international students consider when choosing a study destination is important in attracting more foreign students. Malaysia is currently considered a fast-becoming educational center for international students as the country has set a target by the year 2020 to attract 200,000 international students from Asia, Africa, Middle East and other continents of the world. Hence, it becomes crucial to examine the factors influencing students' choice to select Malaysia as a study destination. Moreover, willingness of international students to recommend Malaysia to their friends and relatives is also imperative to explore and assess.

Literature revealed that low tuition fee, adaptable culture and environment and research facilities are key factors attracting international students [1]. Mazzarol and Savery [2] explored six key factors influencing the choice of study destination by students. Among those, personal recommendations receive from parents, relatives, friends considered as the significant factor in making final decision. Another study conducted by Mazzarol and Soutar [3] in four countries i.e. Indonesia, Taiwan, China and India reported that recommendations from friends and relatives are the motivating factor directing students towards selection of study destination. However, a limited number of the research focused on the characteristics that appeal prospective international students in the selection or recommendation of the study destination in Malaysian context. Thus, the present study aimed to explore the magnetism of Malaysia as a study destination as well as the factors stirring international students to recommend Malaysia to their friends and relatives.

The following research questions were constructed based on the objective:

1. What are the motives for selecting Malaysia as a study destination by international students?
2. What are the factors encouraging international students to recommend Malaysia to their friends and relatives to further their studies?

CONTEMPORARY MALAYSIAN TRENDS IN STUDENT MOBILITY

There is an increasing trend can be seen in Asian countries to avail the social, cultural and economic benefits of international students. UNESCO has ranked Malaysia as the 11th country in the world by holding 2.5 % of global international students [6]. Moreover, education sector in Malaysia contributed 4 % to the Malaysian Gross National Income (GNI) which is expected to be doubled by 2020 [7].

The international student population in Malaysia grew substantially from 32 students in 1970 to 47,849 students in 2007. By 2010, there were more than 86,900 international students enrolled in public and private higher learning institutions. Higher Education Minister Datuk Seri Idris Jusoh said; *"..as of 2015, Malaysia was an education hub for 151,979 foreign students"* [9].

FINDINGS AND DISCUSSION

A total of 18 international students were interviewed. Findings are described under the codes of the categories and subcategories developed. Representative quotes are used as examples from the raw data. Sources of quotations are coded as R1–R18.

MOTIVES IN SELECTION OF MALAYSIA AS STUDY DESTINATION

Majority of the respondents reported quality of education and low cost of tuition fee as significant motives to choose Malaysia. Beside this, cultural adoption, economical living, beauty of environment, and ranking and credibility of universities are also considered as motivating factors. The findings of the present study contradict with the results of Alves and Raposo [10], where an institutions' current image and reputation seen more imperative than quality. The thematic structure that emerged from the interviews is presented with the percentage of the responses in Figure 1.

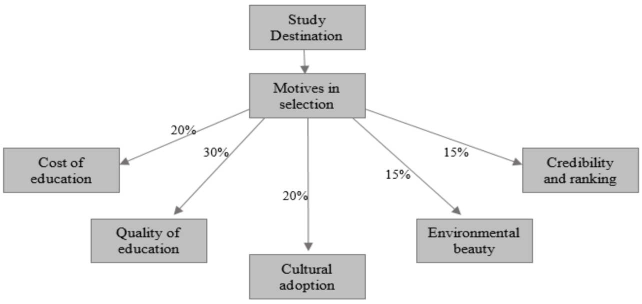

Figure 1. Thematic structure of motives in selection of Malaysia as study destination

RECOMMENDATIONS OF MALAYSIA AS STUDY DESTINATION

Figure 2. comprises of participants' responses against the questions about inspiring factors in the recommendation of Malaysia to friends and relatives. A high proportion of the respondents give worth to the cost and quality of education as the motivation to recommend Malaysia as study destination. Other factors i.e. research based educational facilities, living cost, and credibility of Malaysian universities are also perceived as influencing factors behind their intention to recommend Malaysia.

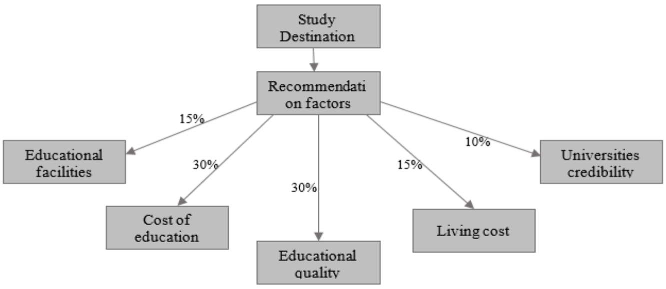

Figure 2. Thematic structure of recommendation for Malaysia as study destination

CONCLUSION AND A WAY TO LOOK FORWARD

In this study, we have assessed the key motivational factors influencing international student's selection and recommendation of Malaysia as study destination. Results show that low tuition fee and education quality are most significant determinants of study destination and inspire international students to recommend Malaysia. Some other motivational factors are cost of adjustment, cultural adoption, environmental beauty and credibility of institutions in Malaysia. Certainly, international students are considered as ambassadors for the university. Malaysia can provide value-added facilitation to international students regarding their educational, social and cultural concerns to upward mobility trends.

REFERENCES

Alves, H. and M. Raposo, *The influence of university image on student behaviour.* International Journal of Educational Management, 2010. 24(1): p. 73-85.

Knight, J., *Education hubs: A fad, a brand, an innovation?* Journal of Studies in International Education, 2011. 15(3): p. 221-240.

Mazzarol, T., L.K. Savery, and S. Kemp, *International students who choose not to study in Australia: An examination of Taiwan and Indonesia*. 1996: AEIF Policy, Research and Analysis Section.

Mazzarol, T. and G.N. Soutar, *"Push-pull" factors influencing international student destination choice.* International Journal of Educational Management, 2002. 16(2): p. 82-90.

MOHE, *Ministry of Higher Education, Laporan Statistik Pelajar*, M.o.H. Education, Editor. 2009: Malaysia.

OECD, *Economic Cooperation and Development.* 2013.

Olutokunbo, A.S., I.A. Ismail, and T. Suandi, *Academic Experience of International Students on Scholarships in Malaysian Universities: The Case of A Private University College.* International Journal of Learning and Development, 2013. 3(6): p. 7-18.

PEMANDU, J.P.M.M., *Economic transformation programme: a roadmap for Malaysia*. 2010, Putrajaya, Malaysia.

Rajaendram, R., *Cutting red tape for international students*, in *The Star*. 2016, The Star Online: Malaysia.

Terry, L., *International initiatives that facilitate global mobility in higher education.* Mich. St. L. Rev., 2011: p. 305.

CHALLENGES AND OPPORTUNITIES FOR INTERNATIONALISM IMPACTS TOWARDS THAI HIGHER EDUCATION

Patcharin Kangkha, Tengku Sepora Tengku Mahadi
School of Languages, Literacies &Translation,
Universiti Sains Malaysia

INTRODUCTION

The phenomenon of internationalism has emerged in higher education systems worldwide because the higher institutions have to respond to the force of globalization which is spreading out in developed as well as developing countries. Therefore, the organizations in higher education have practically integrated the international and intercultural dimensions and principles of their university's missions. Then, all international activities have been designed to achieve their missions. For example, international curricular offerings, promotion of staff and student exchange programs, collaborative research with foreign universities, promotion of other activities such as cooperative education, university-industrial linkages, and cultural exchange, as well as the hiring of foreigners and bilinguals as staff members will be adjusted accordingly. Once internationalization takes place in the higher education system all around the world, then international integration in higher education will allow the organization's culture, mission, and vision to be understood (Deem et al., 2008). Therefore, the policy makers of each institution have to raise their awareness on how to balance localized and globalized contextualization. This means that thinking globally but acting locally needs to be weighed because the internationalization of higher education has become a vital tactic to awaken professionals working in higher education institutions to new challenges, as well as to generate skilled graduates for countries around the world (Moussa & Somjai, 2015).

With respect to the Thai higher educational system, three influential keys have pushed Thai higher universities upholding international scenarios. First, the latest Thai Education Act (1999) and amendments made in 2002 and 2008 authorized the Thai education system to be more autonomous when it comes to course and materials design since the early 2001 (Boriboon, 2011; Wongsothorn et al., 2003). These laws mainly focus on the decentralization of educational authority in local communities and schools, in which they can play more significant roles and actively participate in preparing curriculums suitable to actual situations and serving their real needs (Kangkha & Mungsiri, 2012; Wongsothorn et al., 2003). This means that the educational institutions have been allowed to select or create their own curriculum by using needs analysis. Second, the changes in the neighbourhood and the westernization of the country have been mutually forced by educational policy makers to expand their international participation and collaboration. As a consequence, the internationalisation of formal and informal curriculums is a dynamic interplay of teaching and learning processes, content, and experiences in and out of the classroom (Hanassab, 2006; Leask, 2009). Last, the influx of the English language through the Information and Communication Technology for decades has dramatically affected the use of English language among Thais, particularly in the daily conversations of tertiary students (Luksaneeyanawin, 2005). The challenges and opportunities including the limitation of the flow of internationalism towards Thai higher context will be discussed below.

II. CHALLENGES

The phenomenon of internationalism in the higher education system faces many challenges. It helps serve the rapidly growing demands for the access to higher education, and it stimulates cross-national educational innovations. Furthermore, it prepares students for work in the global economy. Hence, because of the growth of transnational education and cross-border exchange during the internationalism era, Thai higher education systems have also been forced to rethink of retaining, refining, and improving their indigenous capabilities and knowledge to achieve the most sustainable and favourable balance between local wisdom and global knowledge. According to Chang (2011), the higher education institutions in Thailand which aim to provide international programmes should guarantee that the programmes contain the following characteristics to reveal the proper features of international education: a) quality and management efficiency of the programmes; b) international standards and criteria in issues of curricula; c) qualifications and diversity of instructors; d) a diverse student body; e) an international academic learning environment, and f) international standard facilities and services.

Similarly, other ASEAN countries such as Thailand have become more internationalized because Thailand has become the destination for higher education in the Southeast Asian region and other countries. Tran and Pham (2016) noted that the number of international students such as Americans, Australians and British who desire to further their studies in ASEAN such as Malaysia, the Philippines, Singapore, and Thailand is increasing. For instance, the endeavours to internationalize by three dominant and leading public universities in Thailand namely, Chulalongkorn University (CU), Mahidol University (MU), and King Mongkut University of Technology Thonburi (KMUTT) have moved their focus more towards internationalization, and evidence proves that the number of international activities has increased remarkably (Moussa & Somjai, 2015). It can be said that it is time for educational system leaders to raise their awareness of learning from Western to Eastern by shifting their focus on teaching and research paradigms.

2.1 Time to Learn from the East and West

It is not only the external forces like the quality assurance that the Thai higher tertiary institutes have to perform a better academic standard to reach out the international or world ranking (Lao, 2016), but also the expansion of neighbourhood and westernization of the country for its international participation and collaboration around Thailand in order to approach regional, international, or even world recognition. Thus, it is time for Thai higher education administrators and policymakers to adopt and adapt their educational and institutional policies which suit their home contextualization.

Furthermore, the internal forces known as the latest Thai Education Act (1999) and amendments made in 2002 and 2008 authorizing the Thai education system to be more autonomous when it comes course and materials design are directly influenced by all stakeholders in each educational areas i.e. school administrators, local administration officers, employers, students and parents, and so on (Boriboon, 2011; Kangkha & Mungsiri, 2012). These laws mainly focus on the decentralization of educational authority in local communities and schools, in which they can play more significant roles and actively participate in preparing curriculums suitable to actual situations and serving their real needs. This means that the educational institutions have been allowed to select or create their own curriculum by using needs analysis. However, the flood of information and communication technology for decades has dramatically affected the learning and teaching paradigms among towards Thais particularly in the daily conversations of tertiary students (Luksaneeyanawin, 2005). We cannot deny that to make a better quality assurance and academic standard in order to hit the world ranking for the Thai higher education systems, politicians, policymakers, and university administrators have to be conscious of these two key academic paradigms, learning and teaching paradigm and research paradigm, as they are directly affected by the movement towards academic world class education system.

2.1.1 Impact on Teaching and Learning Paradigms

The core duty of all universities is to be in- charge of transferring academic knowledge to university students in order for them to develop learning skills for survival in the real world or as support to their professions. The learning and teaching paradigms in the 21st era have been shifted from an inside classroom to an outside classroom world because university students have always been exposed to massive amount of information since they can easily access online sources anytime and anywhere. Some various cyber sources have been designed for the users/students to share their opinion freely e.g. blogs, facebook, youtube, among others. Moreover, many networks have combined users' lived experiences and face to face interaction (Nam et al., 2013).

Information and communication technology provide many changes and conveniences for the university students' everyday life. Furthermore, online delivery of education is also expanding rapidly to meet the career-specific education and training needs of the adult population.

While such educational opportunities, including many at the sub-degree or certificate level, are increasingly important for social advancement and economic development, they are often not effectively accommodated within traditional higher education governance, financing, and quality control mechanisms. Unlike what the students have faced inside the classroom where the lessons are traditionally discussed by the lecturers and printed materials, the students then have to listen to lectures and take notes based on what might be written on the board. However, some new teachers have learnt from such practices that they have started to shift from a teacher-centred to a learner-centred atmosphere.

Therefore, the higher education administrators and policymakers need to be conscious of the differences of learning and teaching paradigms for better academic performance.

There is no doubt that a learner-centred learning paradigm has replaced the teacher-centred mode. Thus, the roles of teacher and learners have mutually changed for better learning performance, as claimed by the long-term sustainable development of Thai education in 2017-2031, which has proposed five key factors: 1) a better learning society; 2) a learning-based society; 3) a wisdom-based society; 4) a life-long society; and 5) a supportive learning environment (Fry et al., 2013; Marusteri, 2015; Sachdeva, 2015).

In teaching mode, firstly the teachers have to raise their awareness that learners can learn more from their access to online sources which are always present in their real world. Thus, the teaching or lecturing should be based on to real world problems, and students are then offered opportunities to share their opinions and thoughts and feelings. Thus, university lecturers can become the guide, facilitator, and supporter in the teaching process.

A guide refers to a teacher who can exchange and exemplify fruitful sources with various positive and negative values for the students to search and learn more about. Furthermore, the students can weigh pros and cons in selecting appropriate techniques to solve their learning problems or real world problems.

A facilitator is defined as a teacher who can create a supportive learning environment even within limited sources in order to gradually hone their students surrounded by the learning based and wisdom society. For instance, the teacher as a facilitator can design a learning webpage which can easily connect and access varied sources. Creative facilitators can lead their students to become more active learners. The students can feel less-worried because they can access the data freely. Then the students can exert more effort on their studies by employing a scientific process: planning, observing by comparing and selecting, practicing, evaluating and synthesizing. This can be achieved through the richness of information provided by the teacher facilitator.

A supporter knows who can be approached in order to bridge the communication gap among the university lecturers and students. For instance, in the past, the lecturers and their learners can only meet each other only during class hours; therefore, it is difficult for the learners and the lecturers to keep contact. In case the learners faced some learning problems outside of class time, they rarely found support or confirmation of their solutions from their lecturers. However, such situations have changed nowadays due to the cyber era. Some university students spend most of their time on the internet which can have both advantages and disadvantages. For instance, the teacher as a supporter can always stand by the students' side and be ready to pull them back from failure for them to stand again. This strengthens the relationship among teachers and students in the university level. In particular, when the students feel secured to learn, they can learn more.

In an Asian context like Thailand, generally, teachers and students have a good relationship, but this good relationship is not commonly observed in the university level. The gap becomes bigger because they meet each other only during class hours; therefore, in order to bridge this communication gap, the cyber connectivity among teachers and students can bring back valuable relationships any time.

Generally, though the teachers in the university level can become guides, facilitators, and supporters, they can also enrich their roles by being life-long learners in terms of their subject matter and their world knowledge. Most importantly, they can learn more skills in identifying their students' learning skills and adjusting their approach in guiding their students.

In learning mode, the university students' demands are also changing. They have moved towards real life learning, or they increasingly seek courses that enable them to update their knowledge throughout their working lives. Then they can share their thoughts, feelings and messages freely on interactive channels. Therefore, they prefer classroom activities that are similar with their real world. The new learning paradigms, therefore, have been involved in the experienced-based models tending to be genuine pathways inside the classroom. The richness of what the students can reach outside their classroom world through the rich massive cyber media and social network can be achieved. The classroom has become virtual and may exist everywhere at any time of the day. The learning-based models designed from the real world will gradually mould the students to become more active and autonomous learners.

Active learners refer to university students who are motivated to find the answer to the problem or project designed based on their realizations. They then will plan, search the right ways to study, and solve the assigned problem (Nilson, 2016).

Autonomous learners refer to students who can set their learning goals and select study skills to strengthen their subject and world competency in order to achieve their learning goals. In other words, the learners seek to acquire particular knowledge or skills to satisfy labour market needs, as more students prefer to choose courses from the most suitable providers, rather than studying a traditional clearly defined programme at one institution (OECD, 2008).

Educators will have to spend much more effort and creativity on the use of learners' data and analytics to predict and guide student learning. While teachers and educators may always have had some data and support systems to advise their students, it is imperative that an environment where the responsibility for the design of the learning trajectory shifts from educator to student must provide much more information to guide the students. As learners become more active and autonomous, more researches will be conducted because the scientific process in learning will be studied, and this will bring about changes in the research paradigm.

To become part of world ranking, all Thai universities have raised their awareness, for instance, the researches and publications of King Mongkut's University of Technology Thonburi (KMUTT), and Mahidol University (MU) are the key impact factors that lead to world recognition. However, according to Lao (2016), Thai universities did not consider teaching intensive research important. Thai academicians seem to have perceived themselves as lecturers rather than as researchers.

2.1.2 Impact on Research Paradigms

According to Lao (2016), there are three trends that transform Thai universities to become more research-oriented and to receive higher ranking. First, research publication in international journals is considered as a new phenomenon in Thai academia. According to Liefner and Schiller (2008) research activity, even in the sciences, only became a regular activity AS only 10 percent of science researches were conducted for 15 years ago in Thailand; meanwhile only 20 percent of full time academics are engaged in some forms of research. Secondly, Thailand's research strategy is based on a piecemeal, rather than a comprehensive approach. The intention to write and to publish is just part and parcel of the whole picture. The status quo continues to favour teaching. Teaching loads are regular three classes per week which are already demanding, time consuming and labour intensive. Meanwhile, many need to work part time in different universities for extra income.

In order to move to an international level, more financial resources are now available to incentivise academics to conduct research and publish internationally. Many Thai universities reiterate the increasing importance of research in their universities. Moreover, when the institutional administrators have embedded the learner-centred mode and become more learning-based society for training both lecturers and students, then lecturers and students will become life-long learners who can learn subjects based on the real world through research. Hence, they will produce more research and publications in their real world.

2.2 Time for Become a Good Governance and Management

One of the challenges confronting the operation of internationalism in Thai higher education system is related to both key performances identified as Quality Assurance and Academic Standard which will be formed by good governance and management. Thai universities are responsible for developing curriculums, overseeing academic standards, conducting examinations, and awarding of degrees to all students enrolled in university departments and affiliated colleges. The existence of multiple regulatory bodies and funding arrangements poses challenges to institutional governance and management, and the system of affiliated colleges exacerbates these challenges.

Good Governance and Management refer to the capabilities and effectiveness of the practices of institutional heads. It may be that political influence in the selection of institutional heads is one of the reasons for the erosion of institutional authority and autonomy. Most institutions have their own governing bodies. However, the process of nominating the numbers of the governing board is not always free from political interference. Institutional autonomy is essential for effective management. Except for selected areas such as the faculty, universities regulated and controlled by the government, some universities may lack funds and may appeal to the government for financial assistance. At times, institutions complain that they receive more directives than funds from public authorities.

2.2.1Quality Assurance

Universally, the notion of quality is recognized as amorphous and contextual, and it concerns the world of higher education. However, despite the confusion about the concept and how academic quality should be defined and measured, quality assurance has become prominent in higher education systems.

Various quality assurance techniques and approaches have been applied and implemented to promote a culture of quality within institutions of higher learning. It is believed that with good quality control and assessment, a higher education institution will provide high quality education to its stakeholders at an appropriate cost. Consequently, quality assurance exits as a governmental instrument to ensure the national academic standard to obtain the budget for education to run institutions. Therefore, both state and private universities have challenged the different forms of joint ventures to inevitably get better academic performance in order to gain bigger budget (Rattananuntapat, 2015).

Currently, promoting quality assurance in both public and private higher education institutions is an important concern for the Thai Government. One must always be mindful of the fact that Thai higher education system is now facing both qualitative and quantitative crises. Higher education institutions, both public and private, are trying to expand and improve to respond to the dramatically rising social demands. Furthermore, to cope with a greater number of enrolments, many higher education institutions tend to create a more diverse academic system. The government is willing to grant a larger budget considering equity principles to provide equal opportunities of access to higher education for people from any social class. Moreover, the growing demands for quality in higher education have raised concerns in making higher education institutions more accountable to their constituencies and in making the issue of quality assurance as the focal agenda of higher education policy. Consequently, today's governmental agencies and higher education institutions are expected to pay special attention to issues of quality and to increase quality control and customer satisfaction. In most countries, state governments and national quality assurance agencies have significant roles and functions in ensuring quality performance of higher education institutions.

Higher education in Thailand has entered an era of continuous change. The latest development of Thai higher education is currently in the second decade of the national education reform, with the goal of achieving quality education. According to the 15-Year

National Plan for Higher Education Development for 2008 to 2022 formulated by the Office of the Higher Education Commission (OHEC), the Thai Government has given high priority to upgrading the quality of Thai colleges and universities to achieve international standards of excellence while upholding their academic freedom and social responsibility (OHEC, 2008). But if the quality of higher education is poor, it can be reflected in its product – low quality graduates. This means that national resources are spent on social problem enlargement instead of social well-being development. Therefore, caution must be taken to ensure that the increase of enrolments either at public or private institutions is accompanied by higher educational standards and quality assurance measures.

Quality assurance is a systematic review of educational institutions and programs to ensure that acceptable standards of education, scholarship, and infrastructure are being maintained (Brown, 2004). Thailand has undergone various stages of development to provide quality higher education. Different experiences have been developed to search for satisfying and effective quality assurance policies and practices within the confines of national needs and circumstances. In order to move forward, it is of utmost importance for the higher education policymakers and practitioners to understand the roles and their implementation of quality assurance policies in Thai higher education system at present. In a more recent work, Dew (2009) emphasized the concept of quality as continuous improvement and the growing appreciation of quality management systems through the application of new technology. Therefore, the quality in higher education is not just the product, but also a process and should be focused on a whole range of factors associated with the fulfilment of the higher education's mission, namely the quality of inputs, outputs, and processes.

Consistent with the 15-Year National Plan for Higher Education Development for 2008 to 2022 formulated by OHEC, the categorization of Thai higher education system had been designed to reflect the strengths and aspirations of higher education institutions in four sub-systems namely: 1) research and postgraduate universities, 2) specialized universities, including those that focus on science and technology, 3) universities that offer four-year courses and liberal arts colleges, and 4) community colleges (OHEC, 2015).

2.2.2 Academic Standard

Over the last decade, a number of university rankings systems had been increasingly used around the world. The proliferation of ranking exercises, which compare the performance of different institutions, is primarily based on an attempt to provide information about the excellence of academic institutions and programs in relation to their stakeholders. From a government standpoint, quality is achieved when a proper balance among quality, opportunity, and cost is maintained. Accordingly, the government is interested both in accountability and quality improvement in which the emphasis is demonstrating justifiable decisions on higher education policy (e.g., allocation of funding or termination of academic programs) to the society.

Guaranteeing the credibility and acceptance of the quality assurance process requires clarity in policies, appropriateness of the quality assurance framework, transparency of the procedures, integrity of the people involved, and the desired impact on the system (Martin & Stella, 2007, p. 91). The quality assurance system produces information on academic quality and communicates the outcomes and activities of the institution to the management, personnel, students, and external stakeholders (Kettunen, 2012, p. 519). However, many existing quality assurance instruments such as the traditional output measures, performance indicators, common exams or tests, common surveys of student experience, and quality rankings by commercial publications, explicitly have limitations in providing useful information on academic quality to the public and helping maintain and improve academic standards.

III. OPPORTUNITIES

3.1 Time to Increase the Cohort Participation Rate

In order to respond to the impact of internationalization and globalization, the higher educational institutions focus more on international participation by making and broadening their institutional mission towards multinational, multicultural and multilingual contexts. As a consequence, international students bring an important aspect of diversity to the classroom and the university campus, giving Thai students access to global perspectives without leaving Thailand. Another benefit of foreign student participation in Thai universities is the additional revenue stream to finance higher education. In 2003, it was estimated that foreign student enrolments contributed 2.5 billion baht (around USD 75 million or USD 15,000 per student on average) into the subsector (Chang, no date). At many institutions, tuition contributions and fee payments for non-Thai students are nearly double those charged for Thai students. The most popular fields of study among foreign students are business administration, marketing, business English, Thai language, general management and international business management (Collin, 2011).

The enrolment of international students in Thailand is also encouraged by branch campuses of several foreign higher education institutions, such as Webster University and Stamford International University. Franchise universities are at present a limited segment of the existing higher education market. As noted, greater participation from the private international sector could be a growth factor in the supply of tertiary educational services. This often becomes a cause for concern for the stakeholders. The developments are taking place in other regions with the development of the University Mobility in Asia and the Pacific (UMAP6) Credit Transfer Scheme (UCTS) to promote university student mobility in the Asia Pacific region (Mongkhonvanit & Emery, 2003). The key players in international education are involved in either the ECTS or UCTS schemes. The influence of the ECTS or UCTS on the practices of other countries is likely to increase in the future.

3.1.1 Affordability

As the higher education is considered as a long-term investment in human capital, usually involving a large budget, the participation rate of youth ages 18 to 25 with a parent whose highest educational level achieved was primary education was 13 percent. Eighteen percent of them had parents who completed secondary education while 34 percent of them had parents who completed tertiary education. The participation rate of people living in municipal areas is three times higher than that of the people living in non-municipal areas.

To achieve affordability, government policy and higher education institutions should facilitate greater access for all groups of people in Thai society. Specifically, students from poorer families have to get the equal opportunity of access to higher education institutions. Higher education institutions need to provide more direct admission places for socio-economically disadvantaged students, and there should be more scholarships for these students to study within the country and abroad. The move of higher education from elite to mass participation, together with the concept of lifelong learning and advancements in technology, will involve increasing numbers of students participating in higher education.

3.1.2 Marketing

The emergence of global rankings and their growing importance is illustrative of this compelling search for signals and recognition (Van Vught & Ziegele, 2012). Market mechanisms have a significant impact on the ability of schools to attract top scholars, the most competent students, and research funding. Market mechanisms have thus placed increased emphasis on signaling mechanisms to ascertain their value and build their legitimacy to attract the best students. Marketing mechanisms have been used as a context ranging from competitive research grants, to contract research, performance-based funding formulas for teaching and learning activities, and public funding based on the number of students with a view to reduce the reliance of HEIs on public funding in the context of tight education budgets (Kaiser et al., 2000). Likewise, the needs of the local community and labour market become critical as soon as HEIs compete with each other for additional sources of funding. Meanwhile, the emergence of new providers in the public or private sectors has been possible, thanks to the deregulation policies in many countries which have lifted entry barriers to the higher education market.

3.1.3 Funding

Both teachers and administrators have worked under pressure to improve the quality of their teaching and research, despite decreasing resources due to mounting funding constraints. Performance indicators and external quality evaluations are integral aspects of the new model of distant steering, and a number of countries have introduced some degree of performance-based funding (Borden & Banta, 1994; OECD, 2008).

Public higher educational institutions are funded by the government. However, the private sector is faced with severe financial constraints, which seriously limit its ability to provide quality higher education. The failure of the private sector to provide quality higher education could hinder the Government's strategic objective of making Thailand become an international and regional education hub.

The notion of an autonomous university is springing to solve the financial problem in Thai higher education. An autonomous university is defined as the status of a government agency that is neither within the government bureaucracy nor a state enterprise. It becomes a legal entity under state supervision after the approval by the Minister of Education. The University Council can formulate rules and regulations for personnel administration, as well as stipulating staff welfare and benefits. With respect to budgeting and assets, the Government provides a block grant sufficient to guarantee the quality of education the university delivers. This block grant is considered as the university's own income. An autonomous university needs to stipulate its own budget systems, accounting, finance, and asset management. The State Audit Office audits the accounts and follows up on the budget expenditures. The autonomous university does not need to remit its income to the Ministry of Finance. In cases where the income generated is not sufficient to sustain the university's operations and funds which cannot be procured from other sources, the Government will allocate additional funds from the national budget. The university has the right to manage, maintain, and benefit from the state property owned by the institution. The income generated from other various sources will be utilized to strengthen the academic capacity and overall quality of provision (Bovornsiri, 2006).

3.2 Time to Reconceptualise the Apex of Reputation Hierarchy

According to Loa (2016), the Thai university reputation has not only occurred at a regional level, but has also taken place at a national level. Previously, the Thai university reputation was closely matched to its institutional legacy, particularly the years it established. Chulalongkorn and Thammasat University, the first two universities in Thailand, stood at the apex of the reputation hierarchy. International league tables have challenged this mythical view. Over the years, universities such as Mahidol University, King Mongkut University of Technology Thonburi, and Chiang Mai University revealed better academic performance than these two universities in various international rankings. In the 2015 Time Higher Education (THE) World Rankings, King Mongkut's University of Technology Thonburi (55th), and Mahidol University (91th) are among the best universities in Asia. These results can boost international ranking. At the meantime, Chulalongkorn and Thammasat University are not in a better listed. Furthermore, scholars, policymakers, and academicians have to accept that this is the time to reconceptualise the Apex of Reputation Hierarchy. The quality of Thai universities has been remarkably judged by evidence-based, and not imaginative-based mechanism.

IV. CONSTRAINTS

English Language Skills as a Significant Communication Barrier

In dealing with and managing today's international businesses, it is important to recognize that language plays a crucial role. English has currently become well-established as the most powerful international medium. Without sufficient English communicative competence, Thai tertiary students are unable to utilize the professional knowledge and rich experiences they have accumulated for years; this could then result in low self-confidence in performing their daily tasks in the workplace. Moreover, the importance of English language competency affects the professional development of the company personnel. It creates greater demands for the workforce to develop high level English language skills for business communication. Such demands can be seen in business organizations requiring their employees to have highly functional language skills to be able to perform their tasks efficiently. Many jobs require the applicants to be fluent in English. Knowledge of English as a second language is a requirement at this time. According to Mclnnes, James and Hartley (2000), international competition, new developments in teaching and learning, and larger student population contribute to a significant change in the landscape of tertiary education. The private sector has urged universities to be responsive to their identified needs in business. Each university places a great emphasis on the teaching and learning of English. As Bureau of International Cooperation Strategy (2006) states, there are 29 public higher education institutions and 23 private higher education institutions which initiate new international education programs to address those requirements.

Established as the dominant global language in the internationalisation of business and for multi-national cooperation, the English language has brought and continues to bring co-partners and co-workers together so they can share a common vision, exchange ideas, and drive collective agenda. Thus, proficiency in the English language has become an opportunity, and at the same time, a key competitive differentiator for individual workers, corporations, and entire economic systems (Cameron, 2002; Crystal, 2001, 2003; Graddol, 1997, 2006; Grin, 2001; Hart-Rawung et al., 2004; Nickerson, 1998; Pennycook, 1998; Raimaturapong, 2005).

Due to the limitations in the English language proficiency and the goal to upgrade the professional knowledge of the current labour force, the Thailand English Language Development Centre (ELDC) was established on December 23rd, 2003 under the Ninth National Economic and Social Development Plan (2002-2006). It acts as an information and co-ordinating centre to advance the country's workforce in various job disciplines with workers having competent skills and knowledge of the English language. It also aims to conduct needs analyses, design effective training programs, support and coordinate the role of the government and the private tertiary institutes. It also serves as a consultation centre for both the government and the private sectors, as well as for the general public in terms of learning English as a global language in career enhancement and job performance.

Since the English language is considered as a communication barrier for Thai tertiary students, they need to improve their English communication skills. They need to improve their proficiency in English in communicating, encountering the barriers and methods to improve communication skills.

CONCLUSION

In the coming years, Thailand will face more challenges to its competitiveness as internationalism increasingly emerges in tertiary education worldwide. The Thai higher education has inevitably been affected by both challenges and opportunities because internationalism brings about ways on how to exploit positive ideas and raises awareness of the negative ones based on the learning, teaching, and research paradigms of the East and the West. These paradigms can be realized through good governance and management in terms of quality assurance and academic standard. The opportunities for the cohort participation rate regarding affordability, marketing and funding, and reputation rank are a great deal for them to achieve. Meanwhile, a major trend has been the increase in university autonomy and the continued expansion of private higher education. Thailand's strategy and policies keep the country deeply committed to improving both the efficiency and equity of its higher education system. However, language plays a significant role in the communication process when dealing with all international dimensions; on the other hand, it is also a significant barrier in moving towards internationalism. It is obviously seen that English language competency is a major consideration and challenge for Thai education to achieve international recognition.

REFERENCES

[1] Altbach, P. G. (2007). Tradition and transition: The international imperative in higher education (Vol. 7). Sense Publishers.

[2] Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). Trends in global higher education: Tracking an academic revolution.

[3] Boriboon, P. (2011). Language, Ideology and Domination: Problems of English Language Teaching in Thailand and Solutions. Songklanakarin Journal of Social Sciences and Humanities, 17(6), 23-59

[4] Bovonsiri, V. (2003) "Thailand," in Handbook on Diplomas, Degrees and Other Certificates in Higher Education in Asia and the Pacific. 2nd ed. pp. 271-285. Bangkok: UNESCO Asia and Pacific Regional Bureau for Education.

[5] Brown, R. (2004). Quality assurance in higher education: The UK experience since 1992. Psychology Press.

[6] Collins, C. S. (2011). Higher education and global poverty: University partnerships and the World Bank in developing countries. Cambria Press.

[7] Crystal, D. (2003). English as a global language. Cambridge: Cambridge University Press.

[8] Graddol, D. (2006). English Next: why global English may mean the end of 'English as a foreign language'. London: The British Council.

[9] Grin, F. (2001). English as economic value: facts and fallacies. World Englishes, 20(1), 165-178.

[10] Deem, R., Mok, K. H., & Lucas, L. (2008). Transforming higher education in whose image? Exploring the concept of the 'world-class' university in Europe and Asia. Higher education policy, 21(1), 83-97.

[11] Hanassab, S. (2006). Diversity, international students, and perceived discrimination: Implications for education and counselors. Journal of Studies in International Education, 10, 157-172.

[12] Hart-Rawung, P., & Li, L. (2008). Globalization and business communication: English communication skills for Thai automotive engineers. World Academy of Science, Engineering and Technology, 48, 320-330.

[13] Kaiser, F., Vossensteyn, H., & Koelman, J. (2002). Public funding of higher education: a comparative study of funding mechanisms in ten countries (No. 84). Ministerie van OC&W.

[14] Kangka, P., & Mungsiri, P. (2012). Patterns of Developing an English for Communication in Promoting the RMUTSV Undergraduates' Learning Competency Towards ASEAN Labour Market. Journal of US-China Foreign Language, 10(12), 1833-1837

[15] Luksaneeyanawin, S. (2005). Structure and Strategies of Requests in Thai English.

[16] Moussa, M., & Somjai, K. (2015). Challenges for the Internationalization of a Higher Education Institution in the AEC (ASEAN Economic Community): An Intrinsic Qualitative Case Study at RMUTL in Northern Thailand. ABAC Journal, 35(1)

[17] Nickerson, C. (1998). Corporate culture and the use of written English within British subsidiaries in the Netherlands. English for Specific Purposes, 17(3), 281-294.

[18] Office of the Education Council. (2004) Education in Thailand 2004. Bangkok: Office of the Education Council.

[19] Pennycook, A. (1998). The cultural politics of English as an international language. Singapore: Longman Group.

[20] Rattananuntapat, M (2015) Quality Assurance Policies in Thai Higher Education,

[21] The Head Foundation (THF). (2016). Higher Education in Southeast Asia and Beyond: What's new in higher education Southeast Asia and Beyond? Publication of the Head Foundation: Singapore. (July, 2016/Issue 01)

[22] Tran, L., Marginson, S., Do, H., Le, T., Nguy, N. T., Vu, T., & Pham, T. (2016). Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy. Springer.

[23] Wongsothorn, A. (2001). "Thailand language education policy." Asian Conference on Language Education Policy, Japan.

TEACHING ESP THROUGH ONLINE LEARNING PLATFORMS IN A HIGHER EDUCATION INSTITUTION: A LITERATURE REVIEW

Jayanthi Muniandy
Universiti Sains Malaysia

INTRODUCTION

The advent of the Internet in the world of education has brought great transition in the teaching and learning process. Educators and learners are no longer depending on the face-to-face communication alone. They can interact with one another at any time and place without any boundaries with the implementation of online learning tools. The Internet and the introduction of Web 2.0 technologies have led to the emergence of Social Network Sites (SNSs) such as Facebook and Twitter, and also the Learning Management Systems (LMS) like Moodle and Blackboard. These Online Learning Platforms (OLPs) allow both educators and learners to share knowledge and communicate effectively by breaking the four-walls of a classroom. They can disseminate knowledge and store big bytes of information in their gadgets (i.e. smartphones and laptops) as long as they are connected to the Internet network.

ESP IN THE 21ST CENTURY

The main objective of English for Specific Purpose (ESP) course is to cater learners' needs based on their specific profession and also to produce independent learners. In today's era, an ESP course is consisted of discourse and genre analysis (Dudley-Evans &St. Johns, 1998), and also content-based instruction (CBI) that was developed by Briton, Snow and Wesche (2003). These core elements of an ESP course are important to equip ESP learners with specific content, language use and skills for their future employment.
Today, ESP practitioners face various challenges in order to fulfill the objectives of ESP especially in a technology-based environment.

Therefore, educators employ online learning platforms such as Moodle, Edmodo, Blackboard, Facebook and others to provide efficient language learning (Muhammad Kamarul Kabilan, Norlida Ahmad & Mohamad Jafre Zainol Abidin, 2010; Mohamed Amin Embi, Zaidan Abdul Wahab, Abdul Halim Sulaiman, Hanafi Atan, 2011). ESP practitioners could post appropriate learning materials (i.e. content-based texts and grammar skills) and assign relevant tasks or quizzes for learners through the online learning platforms.

PAST RESEARCH OF TEACHING ESP BY USING ONLINE LEARNING PLATFORMS

Table 1 shows previous researches on teaching ESP course through online learning platforms. The compilation of the studies are from e-journals and conference proceedings for the past six years which were obtained through the "google search" engine. The search was refined to three specific learning tools (i.e. Moodle, Edmodo and Facebook) in the teaching and learning of an ESP course.

Table 1: Past research on the use of online learning platform in teaching and learning ESP

OLP	Researcher(s)	Area	Problem	Objectives	Respondents	Instruments	Result
Edmodo	Rinda Warawudhi (2017) - Thailand	English for a Specific Purpose (ESP) - Business Reading Class	Students face problem in connecting to the University Moodle	To identify students' attitude towards the use of Edmodo in the reading class	54 undergradua-tes taking Reading for Business English	1.Online observation 2. close and open-ended questionnair-e	Students have positive attitude towards the use of Edmodo as it is user-friendly and interactive.
Facebook (FB)	Ru-Chu Shih (2013) - Taiwan	English for Business Communi-ation (ESP)	Low proficie ncy and motivat ion level amon g the learners	To study the impacts of integrating FB in English for Business Communication Course.	111 undergraduat-es and post graduates from public university	1. Pre test and post tests 2. Qualitative analysis on FB postings 3. Interview 4.Question-naire	FB improves learners' competency on ESP and it also increases their motivation and interest level.
Facebook (FB)	Mislaiha Bt. A. Ghani (2015) - Malaysia	Technical English Communic-ation (ESP)	Insufficient class hour time to teach English language.	To examine the effectiveness of carrying out T&L activities through FB in the ESP course	35 engineering student from a college	1. Document analysis 2. Observation 3. Interview	FB creates interactive and fun learning environment, and develops learners' command of English language.
Moodle	Galina Kavaliauskienė (2011) - Mykolas Rumeris University	English for a Specific Purpose (ESP)	Rapid development of e- learning at university level	To investigate ESP learners' attitude towards Moodle in revising vocabulary and reading comprehension	72 students from psychology and social work programs	Question-naire	Learners prefer to use Moodle

RESEARCH GAPS

The followings are research gaps based on the past research on teaching ESP through online learning platforms.

1.There is still a lack of in-depth study on the teaching and learning of an ESP course through an online learning platform.

2. An extensive research is needed to explore more on the functions of the feature(s) in an online learning platform for a successful learning of an ESP course.

3. Despite having positive feedback from ESP learners on the use of an online learning platform in the teaching and learning process of an ESP course (ie. Business Communication English and Technical Communication English), the result of the study could not be generalized with other ESP courses.

4. There is a need to measure the development of ESP skills such as reading, writing, speaking and listening through the online learning platform.

5. In-depth study on ESP learners' perception towards the use of an online learning platform is needed to accept and adopt a specific platform in a tertiary education institution.

REFERENCES

Briton, D., Snow, M.A., and Wesche, M.B. (2003). Content-based Second Language Instruction. University of Michigan Press.

Dudley-Evans, A., & St. John, A.M. (1998). “Developments in English for Specific Purposes: A Multi-Disciplinary Approach”. Cambridge University Press. Cambridge.

Muhammad Kamarul Kabilan, Norlida Ahmad & Mohamad Jafre Zainol Abidin (2010). Facebook: An Online Environment for Learning of English in Institutions of Higher Education? In “Internet and Higher Education (ERIC)”. Vol. 13(4), pp.179-187.

Mohamed Amin Embi, Zaidan Abdul Wahab, Abdul Halim Sulaiman, Hanafi Atan, 2011).

Rinda Warawudhi (2017). The Evaluation of Edmodo in Business Reading Class in “International Journal of Information and Education Technology”, Vol. 7(2), pp. 153-158

Ru-Chu Shih (2013). Effect Of Using Facebook To Assist English For Business Communication Course Instruction in “TOJET: The Turkish Online Journal of Educational Technology”, Vol. 12(1). pp. 52-59.

Mislaiha Bt. A. Ghani (2015). Using Facebook in Teaching and Learning English in The International Conference On Language, Literature, Culture and Education (ICLLCE) 25th and 26th April.

Galina Kavaliauskienė (2011). Moodle In English For Specific Purposes At Mykolas Romeris University in SOCIALINIS DARBAS. Vol. 10
(1). pp. 112-119.

CREATIVE DESIGN LEARNING

Koo Ah-Choo, Ng Lynn-Sze*, Yuen May-Chan**, and Chin Weng-Ping (Lydia)**
Faculty of Creative Multimedia, Multimedia University;
***Faculty of Creative Industries, Universiti Tunku Abdul Rahman*

INTRODUCTION

A high-skilled designer is greatly valued and admired. Digital design in the area of products such as website, apps or content creation are widely applied nowadays; how these designers think is something that we like to explore. Lawson (2006) strongly promotes the thinking process and problem solving in design. Designers work within the constraint of resources and to meet the purpose of design. Herbert A. Simon as cited in Waloszek (2012) defined design as the "transformation of existing conditions into preferred ones." Prof Barry Katz emphasised that the design is "not just how it looks or even just how it works but the entire emotional valence of using product from beginning to end is now a condition of entry into the market" (SAP TV, 2017). Katz elaborated that design ideas and creativity is also applicable to social area such as refugee children educational strategies or tackling problem on obesity (as cited by Townsend, 2017).

DESIGN THINKERS

The person who conducts the design thinking is design thinker. Design thinking has become an innovative pedagogy in 2016 as proposed by Sharples et al. (2015), where the following eight characteristics of design thinkers are highlighted,

1) Design thinkers embrace diverse perspectives; 2) Design thinkers combine interdisciplinary knowledge and skills to generate solutions, which may be based on their practical experience; 3) Design thinkers are focused on products - they understand the properties and constraints of materials, working within these constraints while testing the boundaries; 4) Design thinkers possess strong visual literacy. They sketch and develop their ideas visually; 5) Design thinkers do more than resolve technical problems - they explore how their designs will respond to human needs and interests; 6) Design thinkers look beyond the immediate project and its requirements; 7) Design thinkers are adept team workers who can effectively work in group settings towards a common goal; 8) Design thinkers are oriented to action. (p. 22-23)

Cultivation of these thinkers' characteristics is crucial. Waloszek (2012) in his article has tabulated several models of design thinking; he summarised his experiences in paragraph 23, on design, to these generic processes,

1) Understand the problem: Get an initial understanding of the problem; 2) Observe users: Observe users, visit them in their (work) environment, observe physical spaces and places; 3) Interpret the results: Interpret the empirical findings; 4) Generate ideas (Ideate): Engage in brainstorming sessions to generate as many ideas as possible; 5) Prototype, experiment: Build prototypes and share them with other people; 6) Test, implement, improve: Test, implement, and refine the design. (para. 23)

This paper proposes Laxton's Model (as cited from Lawson, 2006) for creative design learning. Waloszek's summary of the design processes is integrated into this model to provide some explanations on the three main stages.

LAXTON'S THREE-STAGE MODELS FOR CREATIVE DESIGN LEARNING

Laxton's Model of creative design learning, which is a metaphorical model based on a hydroelectric plant, can provide a visual and yet simple guide to design instructors when teaching design courses. Figure 1 show the three stages of the model,

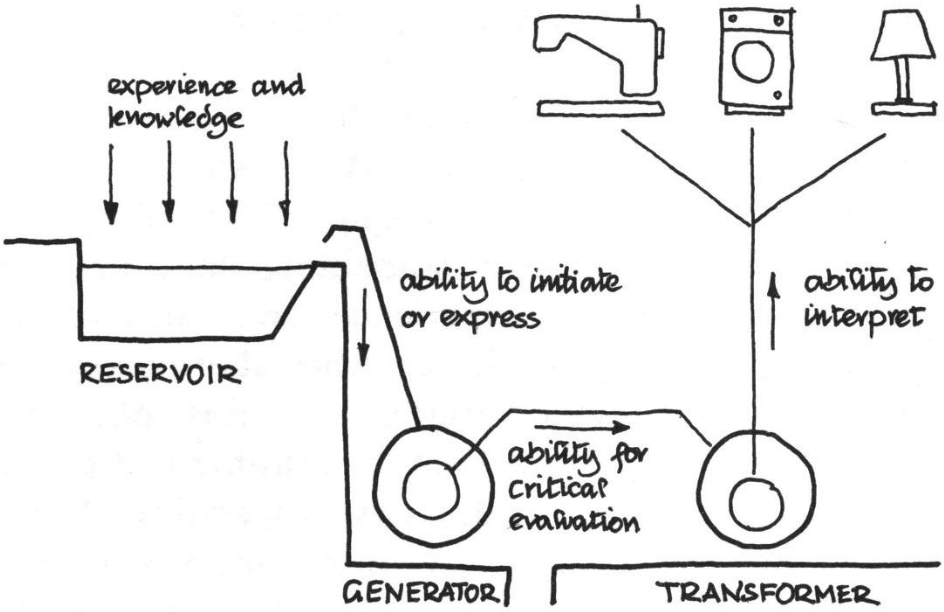

Figure 1: Laxton's model of design education (cited by Lawson, 2006)

Table 1 proposes the idea how this model can be translated into creative design learning and the thinking processes.

Table 1: Integrating Laxton's model into creative design learning

Model Phase	Thinking actions Required (by design trainees)	Design Trainees' Role / Learning about Creative Design	An example of Visual Effect (VFX) Design Learning
Reservior (Understand problem, observe users, interpret the results)	To initiate; to express	Initiation of an idea to solve a problem. The problem is usually given in the project brief. To initiate a new idea (for solving the problem) improving the current system.	Visual Problem; take action for the problem given.
Generator (Ideate / form the idea)	To critically evaluate; and to discriminate between idea	Designer to express their ideation; Always think of target audience – empathetically propose idea to meet their needs. Learners critically conduct evaluation on the ideas; All rounded consideration are critical at this stage.	Trainees brainstorm the best visual effect ideas, presentation of the story & identified skills required
Transformer (Prototype, experiment; test, implement, improve)	To interpret; to translate idea into appropriate and relevant context; to familiarise with the idea of others	Interpretation is to translate the idea into the product or services; Test on the prototype; Show to the sample audience or users; Improve the design prototype	Visual effect ended with a new visual scene / stories; test on audience; refinement on the effects

CONCLUSION

Creative design thinking fundamentally addresses the problem and devises creatively solutions to problems. The learning of design should provide more openness and creativity for student to express their ideas, and assist them in getting better design ideas, within the users' context, for solving the real problems.

REFERENCES

Lawson, B. (2006). How designers think: the design process demystified. London: Routledge.

SAP TV (2017, July 21). Design as Competitive Advantage [Video file]. Retrieved from https://youtu.be/cB43c3o18Tk

Sharples, M., de Roock, R., Ferguson, R., Gaved, M., Herodotou, C., Koh, E., … Wong, L. H. (2015). Innovating Pedagogy 2016: Open University Innovation Report 5. Open University Innovation Report 5. Milton Keynes. http://doi.org/10.2791/83258

Townsend, P. (SAP S. (2017). Designers finally earn their seat. Retrieved August 28, 2017, from https://experience.sap.com/news/designers-finally-earn-their-seat/

Waloszek, G. (2012). Introduction to design thinking. Retrieved August 28, 2017, from https://experience.sap.com/skillup/introduction-to-design-thinking/

REVISITING THE CREATIVITY-MENTAL ILLNESS RELATIONSHIP: IS SOCIAL ALIENATION A MEDIATOR?

Gabriel Gim Chien Wei
School of Business and Management
Han Chiang College

INTRODUCTION

Popular rock artistes such as Kurt Cobain, Chris Cornell, and Chester Bennington, to name a few, shared a common trait. They committed suicide despite having attained superstardom. Although they were all rock icons revered by fans around the world for their musical genius and creative songwriting, these rockers had suffered from depression (Schonfeld, 2017). Other well-known creative figures from the past like Beethoven, Edgar Allen Poe, Jackson Pollock, Micheangelo, Mozart, and Vincent van Gogh (Carson, 2014; Neihart, 1998) also suffered from mental illness. It somehow tells us that creativity blends with mental illness.

PROBLEM STATEMENT

Mental illness strikes 40% of the Malaysian population and experts believe the figure is expected to continue to rise in the future (Kanyakumari, 2017). Furthermore, mental health problem is expected to be the second biggest health problem after heart diseases by the year 2020 (Bernama, 2016).This is because an approximate of 400,227 patients sought psychiatric help from government hospitals in 2008 and 2,000 new schizophrenia cases are being reported every year (Bernama, 2016). It is critical to understand the underlying factors contributing to mental illness in Malaysia judging by the rising reported cases of poor mental health. Therefore, a study on the relationship between creativity and mental illness deserves a revisit.

THE RELATIONSHIP BETWEEN CREATIVITY AND MENTAL ILLNESS

Mental illness comes in various forms, which could be autism, attention deficit hyper activity disorder (ADHD), schizophrenia, bipolar illness, specific language impairment (SLI) or dyslexia (Kaufman, Kornilov, Bristol, Tan, & Grigorenko, 2010).

This study uses the social capital theory (Adler & Kwon, 2002) to explain the causal relationship flowing from creativity to mental illness. Social capital is a social resource to an individual, such as sympathy, trust, and forgiveness offered by others, that specifically facilitates career success, job attainment, and entrepreneurial opportunities (Adler & Kwon, 2002). It makes sense then that individuals who lack such social resources are prone to poor mental health.

Zhang, Chan, Zhong, and Yu (2015) explained that creative employees with social capital are able to network and maintain harmonious relationship with others and thus having healthier psychological state. Prior studies (Andreasen, 1987; Burch, Pavelis, Hemsley, & Corr, 2006; Nettle, 2006) have shown that creativity and mental illness are positively related.

Hence, the following proposition is proposed.

Proposition 1: Creativity is positively related to mental illness.

THE MEDIATING ROLE OF SOCIAL ALIENATION

Zhang et al. (2015) define social alienation as someone who is disconnected and separated from a career social network. Through an experiment, Martindale, Anderson, Moore and West (1996) discovered that highly creative individuals are drawn to novelty compared to less creative individuals. Zhang et al. (2015) explained that creative individuals think and behave differently that led them to be socially alienated. Therefore, it is reasonable to posit a positive relationship between creativity and social alienation.

Sommer and Hall (1958) found that alienated individuals are more likely to suffer from mental illness. Through a meta-analysis, Chiaburu, Thundiyil, and Wang (2014) found that alienation is related to negative outcomes which include burnout, strain, and poor health symptoms. It is therefore reasonable to posit that social alienation is positively related to mental illness.

Hence, the following proposition is proposed.

Proposition 2: Social alienation mediates the relationship between creativity and mental illness.

PROPOSED RESEARCH MODEL

Based on the above propositions, creativity is expected to predict mental illness together with social alienation functioning as a mediator. The social capital theory lays the foundation in explaining how creativity leads to social alienation and subsequently, mental illness. Figure 1 below depicts the proposed research model.

Figure 1. Proposed Research Model

CONCLUSION

The relationship between creativity and mental illness merits an investigation due to the rising mental illness cases in Malaysia. From the theoretical point of view, the study of social alienation as a mediator helps to fill in the literature gap in order to understand further how creativity leads to mental illness.

REFERENCES

Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. Academy of Management Review, 27, 17-40.

Andreasen, N. C. (1987) Creativity and mental illness: Prevalence rates in writers and their first-degree relatives. American Journal of Psychiatry, 144, 1288–1292.

Bernama (2016, July 1). More Malaysians will suffer from mental illness by 2020. New Straits Times. Retrieved from: https://www.nst.com.my/news/2016/07/156107/more-malaysians-will-suffer-mental-illness-2020

Burch, G., Pavelis, C., Hemsley, D., & Corr, P. (2006). Schizotypy and creativity in visual artists. British Journal of Psychology, 97, 177–190.

Carson, S. (2014). Leveraging the "mad genius" debate: Why we need a neuroscience of creativity and psychopathology. Frontiers in Human Neuroscience, 8, 1-4.

Chiaburu, D. S., Thundiyil, T., & Wang, J. (2014). Alienation and its correlates: A meta-analysis. European Management Journal, 32, 24-36.

Kanyakumari, D. (2017, April 2). Depression: 40% of Malaysians will suffer from mental health issues in their lifetime. The Star Online. Retrieved from: http://www.thestar.com.my/news/nation/2017/04/02/malaysians-will-suffer-from-mental-health-issues-in-their-lifetime/

Kaufman, J. C., Kornilov, S. A., Bristol, A. S., Tan, M., & Grigorenko, E. L. (2010). The neurobiological foundation of creative cognition. In J. C. Kaufman, & R. J. Sternberg (Eds.), The Cambridge handbook of creativity (pp. 216-232). New York, NY: Cambridge University Press.

Martindale, C., Anderson, K., Moore, K., & West, A. N. (1996). Creativity, oversensitivity, and rate of habituation. Personality and Individual Differences, 20, 423–427.

Neihart, M. (1998). Creativity, the arts, and madness. Roeper Review, 21, 47-50.

Nettle, D. (2006). Psychological profiles of professional actors. Personality and Individual Differences, 40, 375–383.

Schonfeld, Z. (2017, July 20). After Chester Bennington's death, suicide experts fear a contagion effect. Newsweek. Retrieved from:
http://www.newsweek.com/chester-bennington-suicide-linkin-park-chris-cornell-639940

Sommer, R., & Hall, R. (1958). Alienation and mental illness. American Sociological Review, 23, 418-420.

Zhang, G., Chan, A., Zhong, J., & Yu, X. (2015). Creativity and social alienation: The costs of being creative. The International Journal of Human Resource Management, 27, 1252-1276.

MONEY GAMES REFLECTS ON HUMAN WEAKNESSES: GREED AND DESIRE

Lam Yat Kuan, School of Communication, Han Chiang College
Chan Siok Yee, School of Pharmaceutical Sciences, Universiti Sains Malaysia

INTRODUCTION

Money-spinning industry has sprung up like mushrooms in recent years and raising alarms on investment all around the world. Investment companies such as *Richway*, *Livecoin*, *YSLM*, *CSL* and *JJPTR* had provided many get-rich-quick schemes and gimmicks to attract people to invest in their company. These schemes offered the players with the shortcut to make fast money and though in getting the fast returns from the investment. These money-spinning industries have seen the increasing numbers of players, especially when the investment company offered pyramid-based schemes for the investors. The investors need to recruit members via a promise of payments or services for enrolling others into the scheme and commissions will then collect from the new members. Apart from providing schemes, many investment companies would also offered gifts or incentives as a form of enticement to allure their members to invest into their company. For instance, *YSLM* promised the investors with luxury cars, cash, e-shares and luxury items, including BMW cars when they reached a certain stage of recruitment (The Star Online, 2014).

These investment companies however had suspected of operating money games and pyramid schemes without the authorisation or approval under the laws and regulations administered by Bank Negara Malaysia (Bank Negara Malaysia, 2017). According to The Star Online, Bank Negara Malaysia (BNM) has blacklisted 77 companies involved in unauthorized and illegal transactions amid reports of RM100 million being lost monthly to commercial crime. Among 77 companies, 38 companies were operated without obtaining a license; 22 were gold investment companies; and the remaining 17 were forex trading companies (Sira Habibu, 2012). These companies were operated without the business license and approval by the Bank Negara and thus public are not advised to participate in all the financial activities these investment entities were not protected under the laws.

It was believed that greed and desire are the key factors in driving people to sink deeper and deeper into the money games activities. They were in hope that money-spinning could help them to gain more wealth and thus rely much on the offered fast return schemes. These individuals energized by the money-driven life and consumed by an eagerness to be rich. They were driven by the goal of wealth and hence easily fall into a temptation and trap by senseless and harmful desires. These desires are unique to the greedy and plunge them into ruin and destruction. Individuals might not be able to extricate themselves from these greedy and desires, hence caused to all manner of suffering and unhappiness in their lives (Richard, 2009).

OVERVIEW OF HUMAN NATURE

Thomas Hobbes, a notable philosopher, began with a notion of human nature based on the continuity of egotistical behaviour. In his philosophical ideas, people are materialistic and deterministic. They are naturally selfish and destructive and must be kept in check by a strong central government, which later known as "*Leviathan*" by Hobbes. If without such control, life is solitary, poor, nasty, brutish and short. With this, moral education is an essential in order to maintain the social order. He claimed that human being as a species seem wholly unable to prevent ourselves from taking what we want. For instance, it is like when small kids are playing, they see another kid with a cooler toy and decide they should have it. This is what the quote saying "the grass is always greener at the other side of the fence". He then claimed that no matter what we have, we always want more (Hobbes, 1651). By means of this, greed is emerged as people strive for more, whether more of good, neutral or evil. Restless humans, pursuing their hierarchy of needs, with basic needs usually already fill in their grip, but they still thinking that isn't enough and hence grasp for more of the materials (Richard, 2009).

Greed is a social illness and has been defined as an excessive desire to acquire or possess more than what one needs or deserves, especially with respect to material wealth (Wight, 2005). People tend to be naturally greedy and rarely content with what they have achieved. The concept of all for me and nothing for you is the inherent concept that fosters greed in the society. With this concept, the feeling of "I" and "mine" is the inner nucleus gives birth to greed, hatred and delusion. When the feeling emerges as greed, blind desires and craving for things propel the individual to amass anything and everything for the self (Valli, 2015). Greed could dominate human sentiments, make people happy, sad, curious, ignorant, possessive, docile, aggressive and gentle. With it functions as the major driving force that can boost a person's personal sentiment (Joseph, 2013), individuals may sometimes compromise their ethical values in order to acquire more wealth (Kazeroony & Stachowicz, 2014).

MONEY GAMES REFLECT ON HUMAN WEAKNESSES

Money games phenomenon has taken the media attention in recent years and raising an alarm among the investors, especially when the investment companies collapse. The most recent case, which occupied almost all the front page of every newspaper, a Penang-based investment entity *JJPTR* was collapsed after the company's account had been hacked and caused millions in investments went up in smoke. These money-spinning industries were believed to target on innate human weaknesses and appealed to investors' desire to grow their wealth through get-rich-quick schemes and gimmicks. These investors might never think of the investment company will collapse in one day and they will have to suffer a huge amount of losses.

With the prevalence of money games activities, many investors rely much on the money-spinning industries to grow their wealth and thus constitute to a question: Who wants to work hard if they can get the money from get-rich-quick schemes? When the first batch of people have gained in a good profit from the money games, more people will then follow their footsteps and thus invest more money into the money-spinning industry. These money games players were in hope to gain more wealth from the investment and thus blindly follow the first batch of

people without logical thinking and make sound judgements. Some investors might spend their life savings for the investment and ended up with nothing get back from the investment companies. So, what drove them to place the previous results of blood, sweat and tears into unregulated investment schemes?

The reason stems behind the money games activities would be the investors' poor wealth management and poor experience with regulated investment product providers (Yap, 2017). The need of consumers and services provided by the financial institutions might not reach a balance and it may cause investors lost faith on how to use regulated investments as a mean to grow their wealth. They are not getting what they need from their current wealth management providers and thus feel overwhelmed by the choices available in the market. This is the time when investors turn their heads elsewhere and discover the alternative investment options provided by the unauthorized investment entities. Undoubtedly, many of them end up falling for money games because they are sold on the idea of fixed return investment perceived to be low risk, coupled with the promise of better returns.

CONCLUSION

Money games activities have unfold innate human weaknesses, greed and desire when investors hope to grow their wealth through get-rich-quick schemes provided by the investment companies. They lost the ability to think logically and make sound judgments, especially when they saw the first batch of people grow wealth from the schemes. Draw on the successful of others, more and more investors will then follow their footsteps and hence sink deeper and deeper into the money games industry. Money games is like a drug, once addicted, it might be very hard to get rid of it and later driving the investors into all manner of suffering and unhappiness in their lives.

REFERENCES

Bank Negara Malaysia. (2017). Financial Stability: List of Licensed Financial Institutions. Retrieved from http://www.bnm.gov.my/index.php?ch=fs&pg=fs_mfs_list&ac=118&lang=en

Hobbes, T. (1651). Hobbes's Leviathan. London: Oxford University Press. Retrieved from http://files.libertyfund.org/files/869/0161_Bk.pdf

Joseph, V. J. (2013). Significance of CSR for the Progress of the Society: Mediation between Individualism and Altruism. In Corporate Social Responsibility and its impact on the Society: A Philosophical Study based on the selected industries in Pune for the period 2005 to 2012. Retrieved from http://shodhganga.inflibnet.ac.in/bitstream/10603/23973/11/11_chapter%206.pdf

Kazeroony, H., & Stachowicz, S. A. (2014). Capitalism and the Social Relationship: An Organizational Perspective. Springer. Richard, R. (2009). Greed is Never Enough: The Pursuit of More. Retrieved from https://www.sagealexander.net/assets/GreedNeverEnough.pdf

Sira Habibu. (2012, August 7). 77 companies blacklisted by Bank Negara. *The Star Online*. Retrieved from http://www.thestar.com.my/news/nation/2012/08/07/77-companies-blacklisted-by-bank-negara/

The Star Online. (2014, July 6). Giant billboards promoting scheme not what they seem. Retrieved from http://www.thestar.com.my/news/nation/2014/07/06/get-rich-or-get-duped-giant-billboards-promoting-scheme-not-what-they-seem/

Valli, J. (2015). CSR: An Antidote for Selfishness. XinXii.

Wight, J. B. (2005). Adam Smith and Greed. *Journal of Private Enterprise*, 21(1), 46-58.

Yap, M. H. (2017, June 24). Money game scourge. Retrieved from http://www.thestar.com.my/business/business-news/2017/06/24/money-game-scourge/

THE INFLUENCE OF MUSIC ON MEMORIZATION PERFORMANCE OF MATHEMATICS STUDENTS

**Yuhaniz Ahmad, Fatinah Zainon, Norzaliza Ghazali, Noraziah Man, Fathilah Mohd Alipiah, and Muhammad Yasir Mohamad Yunus*
Universiti Utara Malaysia.
**Corresponding author*

INTRODUCTION

Music is known to affect the brain in numerous ways. Listening to music in restaurants while dining can create the romantic mood and in shopping mall, it can create the relaxing mood while shopping. Besides that, music is also a source of entertainment. People love to spend their time listening to music in sick and in health. Music can improve health and reduce stress (Collingwood, 2015). Those having high blood pressure can lower their blood pressure by listening to music in the morning and evening (Teng, Wong, & Zhang, 2007). Patients with unilateral neglect after stroke can improve their visual attention by listening to classical music (Tsai, et al., 2013). Music has become a tool for overcoming stress, improving health, increasing work productivity and helping brain development (Alban, 2014).

Physical and work performance also can be affected by music. Many athletes around the world preferred listening to music because it can reduce their tension before the game started, and make them perform better (Pottraz, 2013). A positive effect has been observed on the performance of the athletes running 400 meter sprint with the use of synchronous music (Simpson & Karageorghis, 2006). Music can improve our body movement and coordination where it also reduce our muscle tension since our movement are influenced by the rhythm and melody of the music (Rosenkranz, Williamon, & Rothwell, 2007). Productivity at workplace are also affected by music where workers productivity has been found to improve when music was played at the workplace (Lesiuk, 2005).

In education, music has been proven to influence academic performance. Gallup Poll says that 85% of Americans say that those participating in a school music program achieve better grade (Lyons, 2003). A musician playing music on a daily basis can bring great impact to their brain structure. Data collected by the Harris Poll Company, indicated that students who join music program at school tend to proceed to higher level of education and achieve a larger amount of income compared to those not joining the music program (Gosik, 2007). This could be due to significant difference between musician brains and non-musician brains in their functionality (Hyde, et al., 2009).

Another study found quite a similar result. Instead on saying that musician brains and non-musician brains are different in functionality, they on the other hand found that music affected the brain development and conclude that the brain of a musician is better than the brain of a non-musician (Schäfer, Sedlmeier, Städtler, & Huron, 2013). A recent study also reveals that playing an instrumental music will give positive impact on the brain even if the playing was done casually (Wipf, 2016).

Listening to music can helps improving the memory performance. It has been shown that certain types of music can be useful tools for recalling memories (Jausovec N. , 2016). Learning process and retention of information can be maximized with the simultaneous left and right brain activation. The left brain is known to utilized in verbal and analytical activity such as comprehending facts, processing language, solving mathematics and computing while the right brain is utilized in non-verbal and intuitive activity such as developing creativity, creating arts, processing feelings and having imagination (Mclendon, 2012).The brain functions better when the left brain processes cognitive information and the right brain processes the music at the same time.

Many parts of the brain including the auditory and motor are activated while listening to music (Zatorre, Chen, & Penhune, 2007). Having such a great amount of activated brain parts can helps improving reading and literacy skills (Besson, et al., 2007). Numerous studies have looked into the effect of listening to music on memorization (Woloszyn, 2012; Ferreri, Aucouturier, Muthalib, Bigand, & Bugaiska, 2013; Bottiroli, Rosi, Russo, Vecchi, & Cavallini, 2014; Keramati, Iravani, & Ghahraman, 2014; Proverbio, et al., 2015). In addition, there were also studies that focused on the effect of listening to different types of music in enhancement of memorization (Su & Wang, 2010) and mathematics learning (Kesan, Ozkalkan, Iric, & Kaya, 2012; Pinnock, 2015).

Learning mathematics are well known to be very challenging and tough full. Thus, integrating music in mathematics education has been suggested (Brock & Lambeth, 2013; Nesimovića & Zećoa, 2015; Viladot, et al., 2017) and it has been proven that listening to music and mathematics achievement are correlated (Kesan, Ozkalkan, Iric, & Kaya, 2012; Maas, 2013; Pinnock, 2015). Besides, listening to music can enhance the mathematical abilities and the spatial reasoning skills (Jausovec, Jausovec, & Gerlic, 2006). Spatial reasoning skill is a skill to understand how things are related and associated, which is required in careers such as architecture, engineering and mathematics.

As music has been proven to have positive significant effect on the brain, one might interested to know how good is one types of music compared to the other types of music in affecting the brain performance. Classical, alternative, R&B, pop and other genre of music might have different effect. Classical music especially Mozart has been proven to enhance performance on cognitive tests (Mass, 2013). Different people have different preference. Instead of listening to classical music, listening to any personally preferred songs also have positive effects on cognitive performance (Jausovec N. , 2016).

Listening to classical music is not only good on cognitive performance, but it is also has been proven to increase the ability on distinguishing visual image, letters and numbers faster (Bharadwaj & Bharadwaj, 2013). For the same purpose, besides classical music, the same study also reveal that rock music have the same effect as classical music.

MEMORIZING PERFORMANCE AMONG ANALYTICAL PROGRAMMES STUDENTS: AN EXPERIMENT

In general, students taking analytical courses like statistics and mathematics actively use their left brain while students in non-verbal courses like music, film and arts actively used the right brain. Students in academic programmes that are analytical in nature such as mathematics and statistics might use their left brain more actively compared to their right brain. This kind of students could be having a hard time at reading type of courses that require verbal activity involving memorization. They may need to acquire new tools to assist them in scoring good grades for such courses.

Therefore, this study aims to examine the effect of music and the effect of 3 different types of music genre on the performance of mathematics students in word memorization. To achieve the objective, an a complete randomized block design (CRBD) experiment on Universiti Utara Malaysia students, under the School Quantitative Sciences programmes (1Business Mathematics, 2Industrial Statistics and 3Decission Sciences) which are analytical in nature has been conducted.

The participant involved in the experiment comes from two different group of gender (the blocking factor). Each of these participant were then randomly assign to 4 different types of treatment (Classical, rock alternatives and electro house music and no music). All the assigned background music used in this experiment are non-vocal instrumental music since it has been stated that the sound of the human vocal can distract the memorizing process (Maas, 2013).

In 3 minutes time, they have to memorize 40 english word (Braingle, 1999-2017) and write down all the words they have memorize on a piece of paper once the given time is up. The score achieved by each participant is determined by the number of correct words written on the paper and is shown in Table 1. Other factors that might influence their scores such as age and health condition are controlled.

Table 1: Scores obtain by participant

Gender(block)	Types Of Music (treatment)			
	No music	Classical	Rock Alternatives	Electro House
Male	10	16	13	13
Female	11	15	12	12

Table 1 shows the scores obtain by the participants while Figure 1 displays the bar chart of the scores by gender and types of treatments. Listening to the classical music yields the highest score, with 16 score for male and 15 score for female. In addition, when there is no music in were played during the memorization process, the scores achieved by both female and male students are the lowest. The scores achieved by both males and females either when the music were played or not during the memorization process are just different by 1 score. This suggest that the scores obtained are equal for both male and female students. By looking at the different between the highest and the lowest score, we can roughly say that listening to music while memorizing is better than no music and the classical music is the best music to be used.

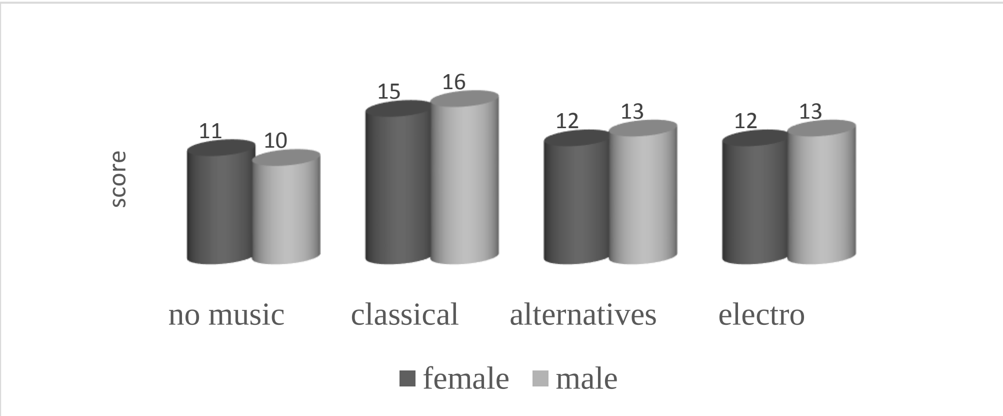

Figure 1: Bar chart for scores obtain by participant

A more precise analysis were carried out and the results were obtained. Table 2 shows the results of the test that precisely indicate the significance of the difference of scores achieved using different types of music assigned. As seen in Table 3, the p-value for the type of music is 0.022 which is smaller than 0.05. Therefore, we can conclude that there music has significant effect on the scores obtained by the participant which in other words, we can conclude that music has significant effect on memorizing performance. With this result however, we are not able to determine the effect of different types of music.

Table 2: Model and factors Effects

- Significant at 5% level of significance

Source	F	*p*-value
Model	530.600	.000
Music_Type	17.000	**.022***
Gender	1.000	.391

Therefore, further analysis has been done using multiple comparison test to see listening to than not listening to music in memorizing process and which types of music gives better performance. Table 3 displays the result obtain from the multiple comparison test. It can be used to determine the best type or types of music to listen to during memorizing process.

Table 3: Multiple comparison test
** significant at 5% significance level * Significant at 10% significance level

(I) Music_Type	(J) Music_Type	Mean Difference	Sig.
No music	Classical	-12.5000	**.022****
	Alternatives	-5.0000	.221
	Electro House	-5.0000	.221
Classical	Alternatives	7.5000	**.088***
	Electro House	7.5000	**.088***
Alternatives	Electro House	.0000	1.000

Referring to Table 3; when the score obtain by the student who don't listen to music were compared with the scores obtain by the student who listen to different types of music, the mean difference were all negative values, which indicate that listening to music during memorization process will increase the students score. However, only classical music significantly improve the students' performance (with p-value 0.022) when compared to the mean score obtain by the students who don't listen to music during the memorization process.

Besides, when the score obtain by the student who listen to classical music was compared to the scores obtain by the student who listen to other types of music, the result shows that listening to classical music is significantly better than listening to alternative and electro house music (both with p-value 0.088). Overall, classical music is the best background music to listen to when memorizing.

CONCLUSION

An experiment with the implementation of Complete Randomized Block Design has been done to observe the effect of different types of non-vocal instrumental music towards score of word memorization of mathematics and statistics students. The results have indicated that listening to music does indeed give a significant positive effect during memorizing process and the best music to be used is the classical music. Therefore, having background music can be considered as an effective tool by educators, parents and students to improve learning in general and memorization in particular. This study only considers three types of music. Future research may involve comparison with other types of music including local community non-vocal instrumental music.

REFERENCES

Alban, D. (2014). Be Brain Fit. Retrieved April 17, 2016, from How Music Affects the Brain for the Better: http://bebrainfit.com/music-affects-brain/

Besson, M., Schön, D., Moreno, S., Santos, A., & Magne, C. (2007). Influence of musical expertise and musical training on pitch processing in music and language. Restorative Neurology and Neuroscience, 25(3-4), 399-410.

Bharadwaj, A. K., & Bharadwaj, P. R. (2013). A Study on the effect of Instrumental Music on Emotional Competency. International Journal of Yoga and Allied Sciences, 2(1), 39-43.

Bottiroli, S., Rosi, A., Russo, R., Vecchi, T., & Cavallini, E. (2014). The cognitive effects of listening to background music on older adults: processing speed improves with upbeat music, while memory seems to benefit from both upbeat and downbeat music. Frontiers in Aging Neuroscience, 6, 1-7.

Braingle. (1999-2017). Retrieved from Brain Teasers, Riddles, Trivia, Brain Exercises, Games, Forums and more...: https://www.braingle.com

Brock, D., & Lambeth, D. (2013). The Effects of Music on Basic Mathematics Fact Fluency for Third Grade Students. Cumhuriyet International Journal of Education, 2(2), 43-60.

Collingwood, J. (2015). The Power of Music To Reduce Stress. Retrieved April 29, 2016, from Psych Central: http://psychcentral.com/lib/the-power-of-music-to-reduce-stress/2/

Corballis, M. C. (2014). Left Brain, Right Brain: Facts and Fantasies. PLoS Biology, 12(1).

Ferreri, L., Aucouturier, J. J., Muthalib, M., Bigand, E., & Bugaiska, A. (2013). Music improves verbal memory encoding while decreasing prefrontal cortex activity: an fNIRS study. Frontiers in Human Neuroscience, 7, Art.779.

Gosik, A. (2007, November 13). Poll: Music education, achievement likely linked. Retrieved April 29, 2016, from OrlandoSentinel: http://articles.orlandosentinel.com/2007-11-13/news/music13_1_music-education-music-program-harris-poll

Hyde, K. L., Lerch, J., Norton, A., Forgeard, M., Winner, E., Evans, A. C., & Schlaug, G. (2009). The effects of musical training on structural brain development. Annals of the New York Academy of Sciences, 1169(1), 182-186.

Jausovec, N. (2016, February 18). How Music Affects Us and Promotes Health. Retrieved April 20, 2016, from eMedExpert: http://www.emedexpert.com/tips/music.shtml

Jausovec, N., Jausovec, K., & Gerlic. (2006, Dec). The influence of Mozart's music on brain activity in the process of learning. Retrieved April 21, 2016, from PudMed: http://www.ncbi.nlm.nih.gov/pubmed/17029951

Keramati, A., Iravani, H., & Ghahraman, V. (2014). Short term memory and the role of background music. International Journal of Language Learning and Applied Linguistics World, 5(4), 161-167.

Kesan, C., Ozkalkan, Z., Iric, H., & Kaya, D. (2012). The Effect of Music on the Test Scores of the Students in Limits and Derivatives Subject in the Mathematics Exams Done with Music. International Online Journal of Primary Education, 1(1), 1-7.

Lesiuk, T. (2005). The effect of music listening on work performance. Psychology of Music, 33(2), 173-191.

Lyons, L. (2003, May 20). Americans Want Music Students to Play On. Retrieved April 20, 2016, from Gallup Poll: http://www.gallup.com/poll/8434/americans-want-music-students-play.aspx

Maas, S. E. (2013). The Effect of Background Music on Math Test Performance of High School Students. Doctoral dissertation.

Mclendon, K. (2012). Funderstanding. Retrieved April 30, 2016, from Left Brain Learning: http://www.funderstanding.com/brain/left-brain-learning/

Nesimovića, S., & Zećoa, M. (2015). The Correlation Between Mathematics and Music—Practice With the Students of the Pedagogical Faculty in Sarajevo. Sociology Study, 5(10), 800-808.

Pinnock, G. (2015). Using Live Reggae Instrumental Acoustic Music to Influence Students' Mathematics Test Scores. Journal of Mathematics Education, 8(2), 115-125.

Pottraz, S. (2013). Music: How to effectively use it before, during, and after activity. Retrieved April 29, 2016, from BelievePerform: http://believeperform.com/performance/music-how-to-effectively-use-it-before-during-and-after-activity/

Proverbio, A. M., Nasi, V. L., Arcari, L. A., De Benedetto, F., Guardamagna, M., Gazzola, M., & Zani, A. (2015). The effect of background music on episodic memory and autonomic responses: listening to emotionally touching music enhances facial memory capacity. Scientific reports, 5, 17237.

Rosenkranz, K., Williamon, A., & Rothwell, J. C. (2007). Motorcortical excitability and synaptic plasticity is enhanced in professional musicians. Journal of Neuroscience, 27(19), 5200-5206.

Schäfer, T., Sedlmeier, P., Städtler, C., & Huron, D. (2013). The psychological functions of music listening. Frontiers in Psychology, 4.

Simpson, S. D., & Karageorghis, C. I. (2006). The effects of synchronous music on 400-m sprint performance. Journal of Sports Sciences, 24(10), 1095-1102.

Spelke, E. (2008). Effects of Music Instruction. (C. &. Asbury, Ed.) Learning, Arts and the Brain, pp. 17-49.

Su, Q., & Wang, F. (2010). Study the effect of background music on cognitive memory. Applied Mechanics and Materials, 37, 1368-1371.

Teng, X., Wong, M., & Zhang, Y. (2007). The effect of music on hypertensive patients. Conf Proc IEEE Eng Med Biol Soc. Tsai, P. L., Chen, M. C., Huang, Y. T., Lin, K. C., Chen, K. L., & Hsu, Y. W. (2013). Listening to classical music ameliorates unilateral neglect after stroke. American Journal of Occupational Therapy, 67(3), 328-335.

Viladot, L., Hilton, C., Casals, A., Saunders, J., Carrillo, C., Henley, J., & Welch, G. (2017). The integration of music and mathematics education in Catalonia and England: perspectives on theory and practice. Music Education Research, 1-12.

Wipf, B. (2016). Research shows significant changes to brains of musicians. Retrieved April 20, 2016, from Great Falls Tribune: http://www.greatfallstribune.com/story/life/health-and-fitness/2015/05/18/research-shows-significant-changes-brains-musicians/27526723/

Woloszyn, M. R. (2012). Memory for facial expression is influenced by the background music playing during study. Advances in Cognitive Psychology, 8(3), 226-233.

Zatorre, R. J., Chen, J. L., & Penhune, V. B. (2007). When the brain plays music: auditory-motor interactions in music perception and production. Nature reviews. Neuroscience, 8(7), 547.

THE USE OF SOCIAL MEDIA AT A MALAYSIAN TRANSPORTATION ORGANIZATION: CREATING BENEFITS OR BANE FOR THE WORKPLACE?

*Nabila Saada Binti Abdul Aziz,*Afiza Binti Mohamad Ali*
Kulliyyah of Languages & Management,
International Islamic University Malaysia.
drfiza@iium.edu.my
**Corresponding author*

INTRODUCTION

Computer-mediated-communication (CMC) tools commonly known as social media, has provided novel competencies for knowledge sharing for organizations (Majchrzak, et al., 2013). The term social media means "a group of Internet-based technologies that allows users to easily create, edit, evaluate, and/or link to content or to other creators of content" (Kaplan & Heinen 2010, c.f. Majchrzak, et al., 2013 p. 33). These abilities are embedded in technologies like microblogging such as employee uses of Facebook, Twitter or Instagram. It was reported that four out of five companies adopt social technologies in the year 2012 (Overby, 2012), and 86% of managers believe in the significance of social media as agents of growth (Majchrzak, et al., 2013) at minimal cost (Sejpal, 2012). However, there are challenges in the workplace due to the pervasive use of social media. Employees may become addicted to the use social media applications to a point of using them during working hours. On the other hand, employers cannot prevent the usage of social media during working hours as most literature show that social media has become increasingly important (Peacock, 2008). This poses a challenge to businesses in workforce performance.

LITERATURE REVIEW

Employees' productivity may be increased by the usage of social media by being sociable, communicative and connected. Surfing the net is said to improve concentration among employees as the brain needs short time-outs to relax and rejuvenate (Fahmy, 2009, cited from Aguenza et al., 2013). Aguenza et al. (2013) reported that more than half of the 2,500 of AT&T's employees, feel that social media increased their skills, productivity and competencies in creativity and problem solving. Most organizations prefer social media sites for employment purposes to lessen hiring costs or CVs produced by job seekers as well as to assess the candidate online (Logeswaran, 2013).

Having said that, the extensive usage of social media sites at work could pose a lot of risks like "loss in staff productivity, data leakage from staff gossiping freely in an open environment, damage to a business's reputation, scam practiced by cyber crooks, and the open access to organization's information due to outdated passwords." (Wilson, 2009, p. 54-56). Breslin (2009) claimed that the organization has the right to reprimand workers for postings that harass co-workers or cause damage to the company. The dismissal of 13 Virgin Atlantic Airplane cabin crew due to improper posting on social media sites (Quinn, 2008) indicate how workers would find ways to be unproductive hence appropriate regulations must be imposed (Cornelius, 2009).

THE PRESENT STUDY

Organizations find that usage of social media at the workplace as acceptable as it enhances work communication and relationship. However, the invasion of privacy can be a major issue.
A quantitative study was conducted on the effects of social media usage by 62 employees of a transportation company in Kuala Lumpur with reference to employee work performance. Findings can be seen in Figure 1.1 below.

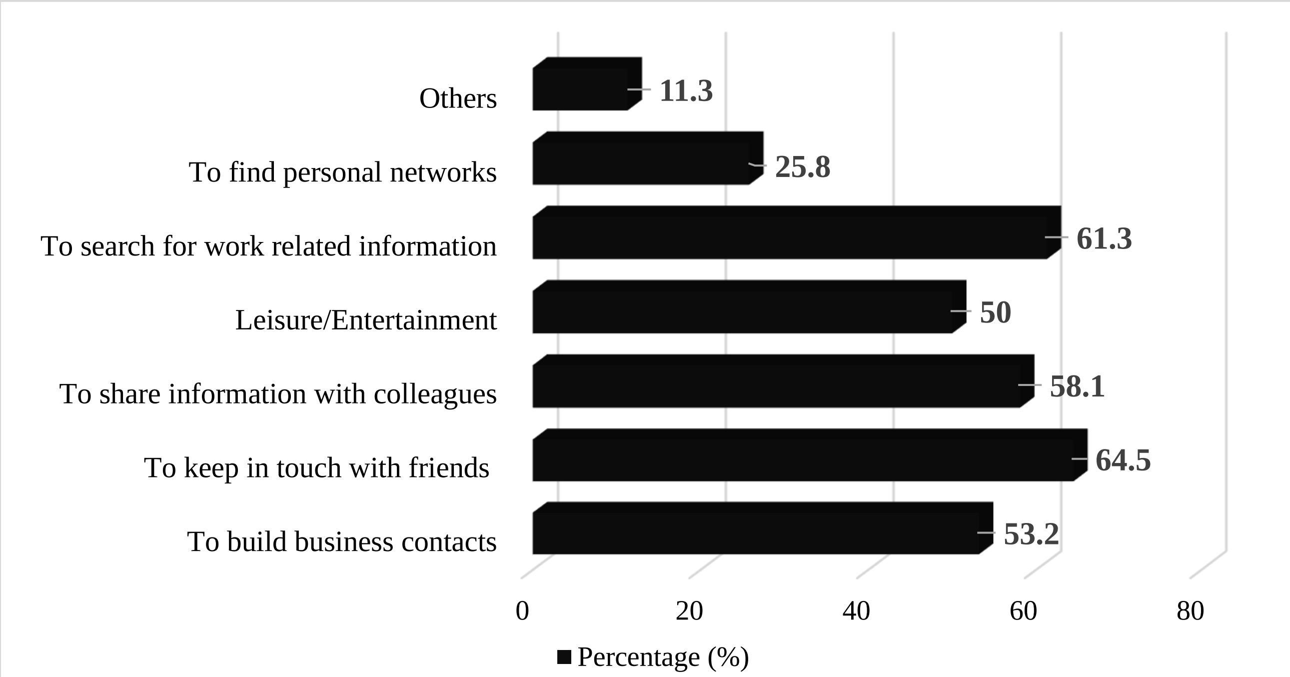

Figure 1.1: Reasons of Using Social Media at the Workplace by Percentage

Majority of the respondents use social media to keep in touch with friends at work (64.5%) while more than half of the respondents (61.3%) use social media to search for work related information. Sharing of information with colleagues (58.1%) and building business contacts appears to be an important reason as well.

Figure 1.2 below shows that more than half of the respondents agreed that disciplinary action is important for excessive usage of social media for personal purposes; that employees should not be judged by their employers on the basis of their social media activities and that close monitoring of social media usage is desired.

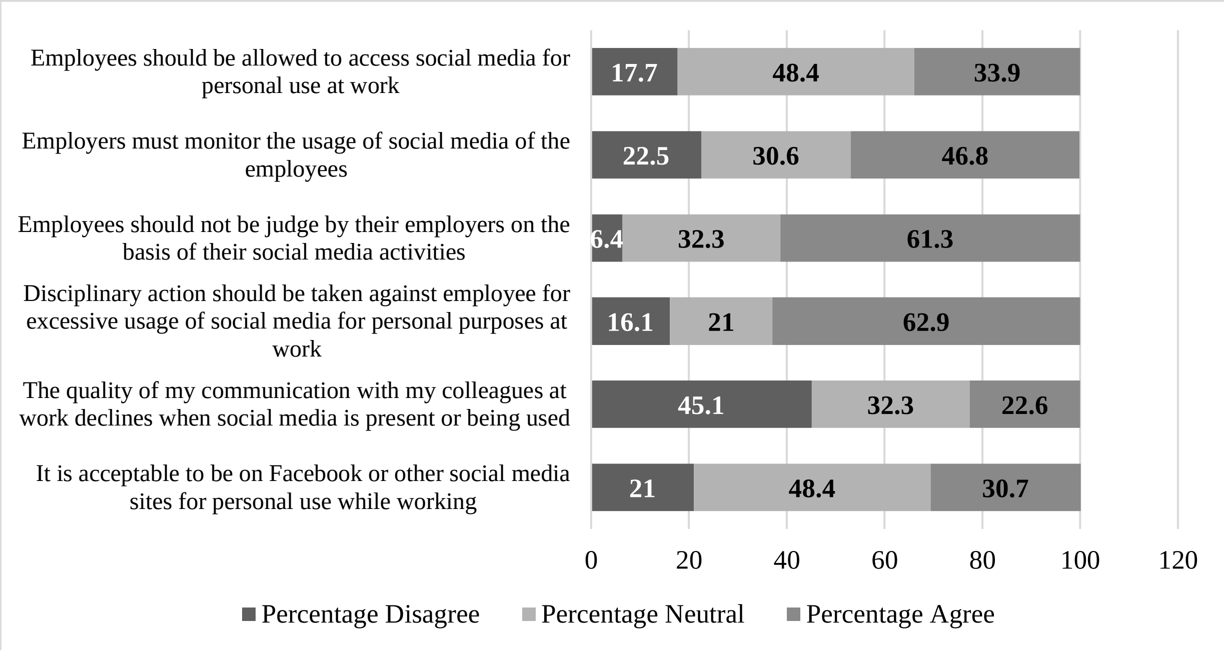

Figure 1.2: Perception on Social Media Usage for Personal Communication at the Workplace by Percentage

Figure 1.3 below shows that more than half of the respondents agreed that the social media in workplace communication keeps them up to date with the necessary current market, encouraged them to think out of the box, thus benefits the company by reducing hiring and promotion cost.

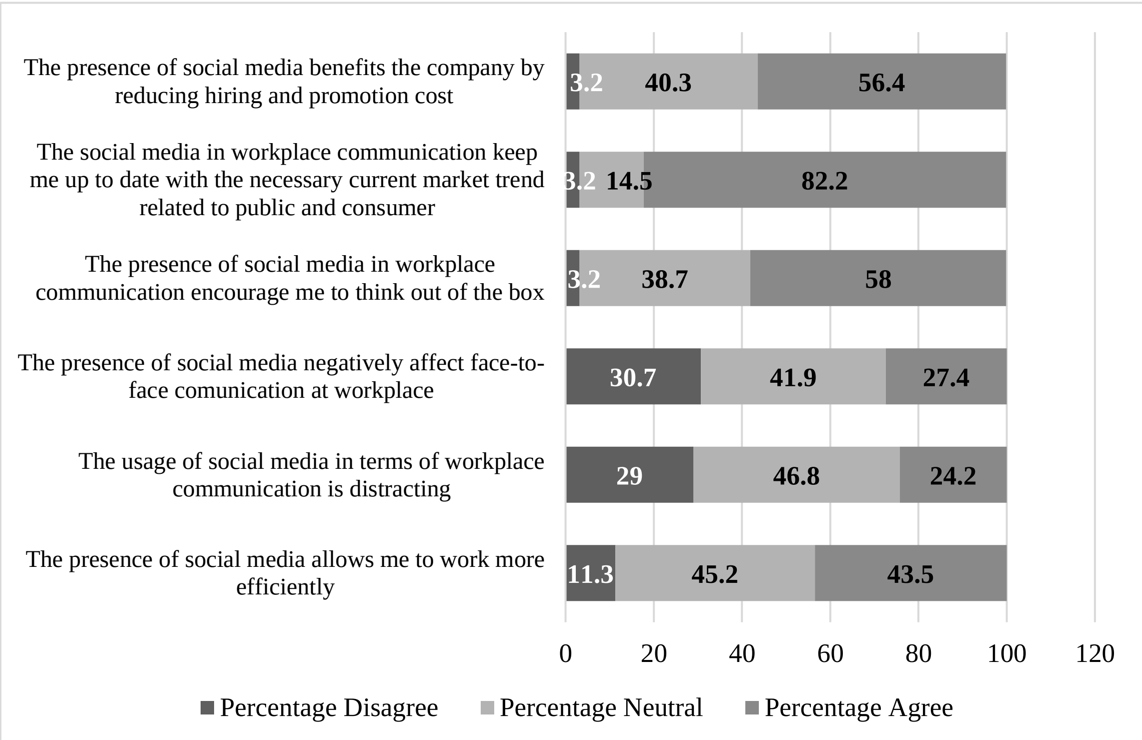

Figure 1.3: Perception on Social Media for Business/Organizational Communication at Workplace by Percentage

CONCLUSION

It can be concluded that while social media can be beneficial to the organization, there must be a mechanism to control and monitor the usage of social media. This can provide a sense of freedom and satisfaction for the employees. Suggestions from the respondents include the call for the authorities to monitor the usage by setting policies such as limiting quota for Internet use and warning the employees that disciplinary action will be taken against those who use social media excessively.

REFERENCES

Aguenza, B., Al-Kassem, A. H., & Som, A. P. M. (2012). Social Media and Productivity in the Workplace: Challenges and Constraints. *Interdisciplinary Journal of Research in Business*, *2*(2), 22.

Breslin, T. (2009). When social networking enters the workplace. *Massachusetts Nurse*, *80*(8), 14.

Cornelius, D. (2009). Online Social Networking: Is It a Productivity Bust or Boon for Law Firms? *Law Prac*, 28.

Fahmy, Miral (2009). Facebook, YouTube at work make better employees, Reuters, Yahoo Tech. Retrieved from http://tech.yahoo.com/news/nm/20090402/wr_nm

KPMG Study: Emerging Markets Lead Social Media Adoption. (n.d.). Retrieved from http://www.kpmg.com/global/en/issuesandinsights/articlespublications/press-releases/pages/social-media-adoption.aspx.

Logeswran, R. (2013). The relationship between generation Y's characteristics and acceptance of social network as job search engine.

Majchrzak, A., et al. (2013). The Contradictory Influence of Social Media Affordances on Online Communal Knowledge Sharing. *Journal of Computer-Mediated Communication*, *19*(1), 38–55.

Nicholson, S. (2011). Infographics: The history of online social networking.

Peacock, L. (2008). Employers watch Facebook usage. *Employers Law*, *4*.

Quinn, B. (2008). Virgin sacks 13 over Facebook chav remarks. *The Guardian Online*, *1*.
Sejpal S (2012) Technology Law. *Bloomberg Law Reports*, 5(6), 18.

Wilson, J. (2009). Social networking: the business case. *Engineering & Technology*, *4*(10), 54-56.

CREATIVELY TRANSITIONING THE TEACHER TO A TEACHER-RESEARCHER

Anne Poh Chin Ho. First-City University College

INTRODUCTION

Institutions of higher learning in the Malaysian private education sector are being upgraded from colleges to university colleges and universities. This progression in institutional status means that a corresponding change needs to take place in transitioning academic staff from teachers to teacher-researchers. The first thing that comes to mind when ‘teacher-researcher’ is mentioned is very likely to be ‘writing research papers for publication’. For many, this thought can be frightening. There may be perceptions of it as being ‘a tall order’ and therefore, seemingly unattainable. Some may be open to the idea but are at a loss at how to make a start. A few may adopt a ‘gung-ho’ approach and plunge into it but gradually find themselves becoming dispirited in the attempt. There may be the hesitant, reluctant or outright resisting few who do not see any purpose, value and rewards in being a ‘teacher-researcher’. This is not to suggest that these feelings and impressions are baseless. It is precisely that they are genuinely felt and experienced by teachers that a thoughtful, creative and sensitively handled change process needs to be implemented.

Managing accurate conceptions of what ‘teacher-researcher’ actually means is vital for laying an important groundwork for the next stage – discussing, sharing and exploring creative ideas for actual teacher-researcher activities and experiments, in ‘real-time’, on-site and at work.

ASCERTAINING TEACHER CONCEPTIONS OF ‘RESEARCH’

There is the need to gain insights into what ‘research’ means to the teacher as a prelude to their engagement with research at work. There may be ‘macro’ - institutional, organizational, governmental and stakeholder related factors that impinge on the teacher’s propensity to be a teacher-researcher. Likewise, ‘micro’, personally held beliefs, perceptions and values are just as relevant if not more so, as powerful drivers of change in us as individuals.
An attitude survey by way of a questionnaire can be used for this.

One effective and comprehensive questionnaire for this purpose is Borg’s (2009) questionnaire that attempts to elicit responses from teachers along the following dimensions:

a. Respondents identify a series of teacher activity scenarios along a continuum of ‘research’/ ‘not research’.
b. What amounts to characteristics of ‘good’ research are rated on a continuum of ‘unimportant’/‘very important’.
c. Agreeing/Disagreeing to a list of factors that contribute to ‘research culture’.
d. Respondents rate their frequency of ‘Reading research’ and ‘Doing research’ as ‘never’/‘rarely’/‘sometimes’/‘often’ and identify a list of accompanying underlying personal reasons.

Borg’s(2009) questionnaire is frequently applied to ascertaining English language teachers’ conceptions of research and comparative research analysis has been made in this context in various countries such as in Cambodia (Moore, 2011); Turkey (Kutlay, 2012); Iran (Tabatabaei and Nazem, 2013) and China (Sun, 2016). Borg’s own research published in 2009 covers teacher respondents from 13 countries. Other research are conducted in similar vein but use their own research instruments for example, in the Philippines (Morales et al., 2016), Australia (Gray and Cambell-Evans, 2002) and the UK (Reis-Jorge, 2007).

SITUATING THE TEACHERS' SELF-CONCEPTION OF RESEARCH IN THE RESEARCH-TEACHING NEXUS

Determining what teachers think of as 'research' can result in many and varied personally held conceptions of it. All of these conceptions may be valid within broad and narrow definitions of research. How then do we find a place for everyone to participate as a teacher-researcher that orientates towards his/her own conception of research?

One example of this is provided by Visser-Wijnveen et al's (2010) 5 dimensions of teacher involvement/participation in the research-teaching nexus, which they identify as:

1. Teach research results
2. Make research known
3. Show what it means to be a researcher
4. Help to conduct research
5. Provide research experience

The authors then provide various teacher profiles based on these 5 dimensions in Table 1 below:

Table 1: Profiles related to dimensions

Dimensions	Profiles				
	Teach research results	Make research known	Show what it means to be a researcher	Help to conduct research	Provide research experience
Tangible – Intangible	Tangible	Tangible and Intangible	Intangible	Tangible and Intangible	Tangible
Unidirectional - Reciprocal	Reciprocal	Unidirectional	Unidirectional	Unidirectional	Reciprocal
Content – Process	Content	Content	Process	-	-
Learning about research – Participation in research	Learning about	Learning about	Learning about	Learning about	Participation
Research in general – Current research	General	General	General	Current	Current
Disciplinary research – Teacher's own research	Disciplinary	Teacher's own	Teacher's own	Teacher's own	Teacher's own

Source: Visser-Wijnveen et at., (2010) p. 207

As the literature in teacher-researcher suggests, ascertaining what teachers think of as 'research', is a critical starting point in planning and implementing a teacher-researcher agenda. This then allows teachers to be profiled in order help find their niche in the wide array of research-teaching nexus discussions put forward to guide the transition from being teachers to teacher-researchers.

REFERENCES

Borg, S. (2009). English Language Teachers' Conceptions of Research. Applied Linguistics, 30 (3), 358 – 388.

Gray, J. and Campbell-Evans, G. (2002). Beginning Teachers as Teacher-Researchers. Australian Journal of Teacher Education, 27 (1), Article 4.

Kutlay, N. (2013). A survey of English language teachers' views of research. Procedia – Social and Behavioral Sciences, 70 (2013), 188 – 206.

A.P.D., Hermosisima, V.C., and Gerundio, M.G. (2016). Issues in Educational Research, 26 (3), 464 – 489.

practitioners – A longitudinal case study. Teaching and Teacher Education, 23 (4), 402 -417.

Sun, X. (2016). A Survey on Chinese College English Teachers' Conceptions of Research and Research Engagement. US-China Education Review, 6 (2), 77 – 90.

Reis-Jorge, J. (2007). Teachers' conceptions of teacher-researcher and self-perception as enquiring

More, S. (2013). Cambodian English Teachers' Coceptions of and Engagement with Research. Proceedings of the International Conference: Doing Research in Applied Linguistics, 83 – 98.

Morales,M.P.E., Abulon, E.L.R., Soriano, P.R., Ma, Tabatabaei, O and Nazem, Y. (2013). English Language Teachers' Conception of Research. dois10.4304/+pls.3.3.521-532.

Visser-Wijnveen, G.J., Van Driel, J.H., Van der Rijst, R.M., Verloop, N. and Visser, A. (2010). The ideal research-teaching nexus in the eyes of academics: building profiles. Higher Education Research & Development, 29 (2), 195 – 210.

CAREER PATH IDENTIFICATION AMONG SECONDARY SCHOOL STUDENTS USING DECISION SUPPORT SYSTEM

Zamri Ibrahim, Mohd Nasrom Mohd Nawi, Shaharum Shamsuddin,
Nik Siti Hanifah Nik Ahmad and Mohd Nazri Mat Husin
Universiti Sains Malaysia

Author note
This project was supported by a short-term research grant from Universiti Sains Malaysia

INTRODUCTION

CAREER PATH IDENTIFICATION AMONG SECONDARY SCHOOL STUDENTS USING DECISION SUPPORT SYSTEM

The study was to develop a DSS in career mapping for secondary school students using Malay language as the medium. It is uncommon to see a DSS of this type being used today. Many upper secondary school students from Malay speaking community have low understanding and knowledge about availability of possible future careers. They require further information about different types of courses offered in higher institutions, and the career options related to the courses.

DSS built is an information system used to solve unstructured problems of identifying career path for students. The main characteristics are to provide quick and easy access to information, easy to understand and generate useful reports to ease the burden of decision making.

SYSTEM DEVELOPMENT METHODOLOGY

Frank Parsons, as the founder of career guidance believed that a person should actively choose his career rather than allowing chance alone to operate in the career decision process. Parsons' process of studying individuals, considering occupations and matching them provided the foundation for trait and factor theory of occupational choice (Patton & McMahon, 2014). According to the theory, choosing an occupation involves trying to match an individual to a job so that their needs will be met and their job performance will be satisfactory (Zunker, 2011). The terms trait and factor refer to the assessment and characteristics of the person and the job (Sharf, 2013).
Using the theory, a conceptual framework for the development of DSS was identified, as in Figure A1.

THE SYSTEM PHASES

Php open source language and MySQL database engine were used for the system development. Three phases identified (see Figure A2) and discussed below.

DEVELOPMENT OF QUESTIONNAIRES.

RIASEC six personality types of Holland Code (Holland, 1997) was used to prepare a total of 101 questionnaires for trait identification of student, with concentration on his daily activities and experiences at school, with friends, at home, with families and during leisure times. For each question, Likert scale of 1 to 5 was used with 1 as least possible answer, and 5 as the most possible.

MAPPING OF STUDENT'S RESPONSES TO COURSES.

Database about available choices of courses in Malaysian public institutions were accessed from official websites of each institution. The database consisting lists of 248 faculties from 21 institutions, with 100 sub-field of studies were prepared.

MAPPING COURSES TO CAREERS.

A total of 415 careers, based on Malaysian job market were identified and included into database.

With the mapping, students could explore possible careers in relation to the courses suggested.

OUTCOME

THE SYSTEM

The system was successfully developed and operational starting 15 March 2017. It can be accessed at http://petakerjaya.kk.usm.my. Important features of the system are examined below.

CLUSTERS OF EDUCATION DISCIPLINES.

The study has classified education disciplines into eleven clusters (engineering, building & architecture, health sciences, pure & applied sciences, information & communication technology, agriculture & forestry, law, humanities & social studies, management & business, education, and arts), where student's responses were mapped to these clusters. The selected eleven clusters were deemed relevant to current environment of education disciplines.

LISTS OF COURSES AND CAREER OPTIONS.

Wide choices of courses and career options being listed, to give broad range of selection for students to avoid rigidness in decision making. For decision making, students might be influenced by other surrounding factors such as social influences, growth and change in traits, and work environment. It is predicted that in the twenty-first century, individuals will engage in career decisions about learning and work several times in their lifetime and that they will change jobs several times during their working lives (Savickas et al., 2009).

JOB EXPLANATION.

Simple explanation was included for most of the listed careers for the students to have some understanding on the job nature.

SYSTEM FLEXIBILITY.

The system is flexible to cater for future enhancement or changes, especially for further improvement on questionnaires, re-adjustment of education clusters, any addition and / or deletion of courses, and respective faculties, also expansion on career list.

STUDENTS' FEEDBACK

After 77 days, the system was utilised by 448 students across the country. Based on feedback, more than 83% students satisfied with the system, whilst 88% of them agreed that it helped them in making decision for the suitable courses to be applied, but only 74% of them would choose the courses based on field of studies as suggested by the system.

CONCLUSION

DSS was developed as a user friendly, simple system for students and school counsellors. The most important benefit from the system is the career mapping capabilities, especially to school leaving students who need to choose the courses to further their studies, and highlighting them about the possible choices of careers that they might jump into. From students' feedback result, it can be concluded that the system was accepted as a tool that helped them decide on courses to be applied. It is interesting to note that much lower percentage of them (74%) will choose the courses as suggested, showed that other surrounding factors influenced their decision making.

For the researchers, the developed database of courses, careers and students' responses are important data whereby various studies and analysis on students' trend can be done. It is not only useful in career mapping, but might be for future planning and development of education system in Malaysia.

REFERENCES

Holland, J. L. (1997), *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments* (3rd Ed.). Odessa, FL: Psychological Assessment Resources.

Patton, W., & McMahon, M. (2014). *Career Development and Systems Theory: Connecting Theory and Practice* (3rd Ed.). Sense Publishers.

Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J-P., Duarte, M. E., Guichard, J., Soresi, S., Van Esbroeck, R., & van Vianen, A. (2009). Life Designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behaviour, 75*, 239-250.

Sharf, R. S. (2013), *Applying Career Development Theory to Counselling* (6th Ed.). Brooks/Cole Cengage Learning.

Zunker, V. G. (2011), *Career Counselling: A Holistic Approach* (7th Ed.). Thomson Brooks/Cole.

APPENDIX A

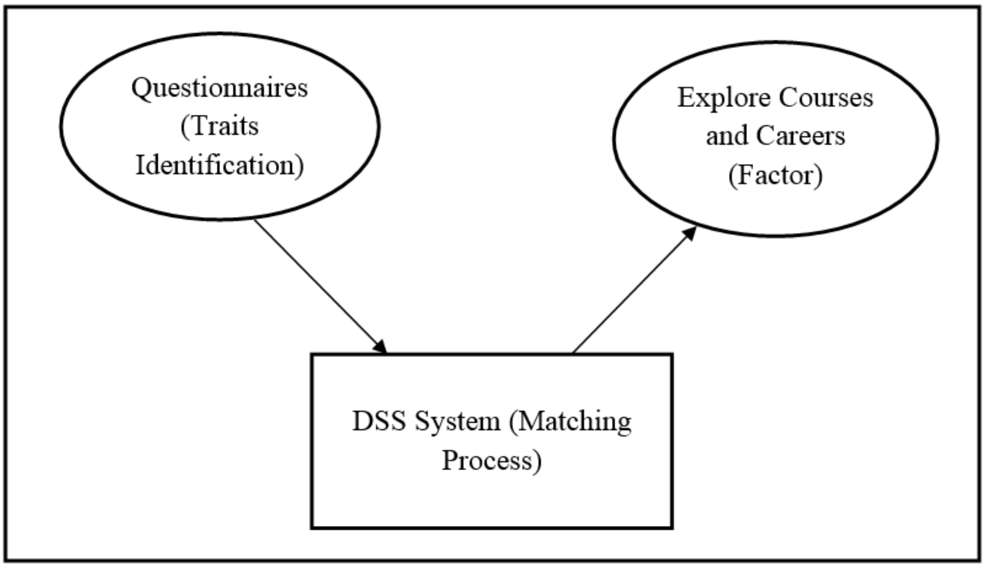

Figure A1 Conceptual Framework for DSS

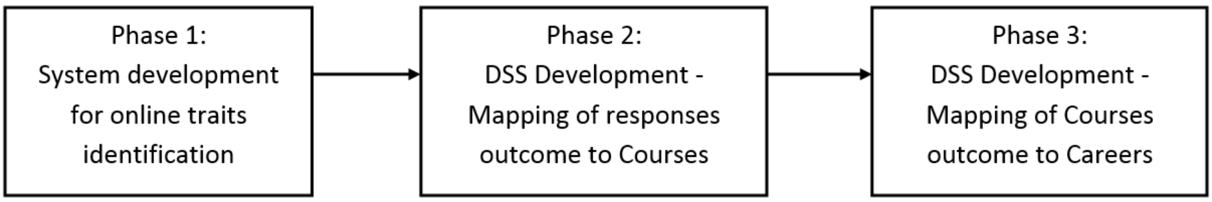

Figure A2 DSS System Phases

CALLING FOR ARTICLES

The *Bulletin of Higher Education Research* welcomes short articles, opinions, comments and information about people and events related to higher education in public and private institutions in Malaysia and abroad.

Please address your corresspondence to:
The Editor-in-Chief
Bulletin of Higher Education Research
National Higher Education Research Institute
Universiti Sains Malaysia
Block C, Level 2, sains@usm
No. 10, Persiaran Bukit Jambul
11900 Bayan Lepas, Penang
MALAYSIA

Tel: 604-653 5758 (Administration); 653 5760 (Research)
Fax: 604-653 5771
Web: http://www.ipptn.usm.my
E-mail: ipptn@usm.my

ISSN: 1675-6428
9 771675 642000